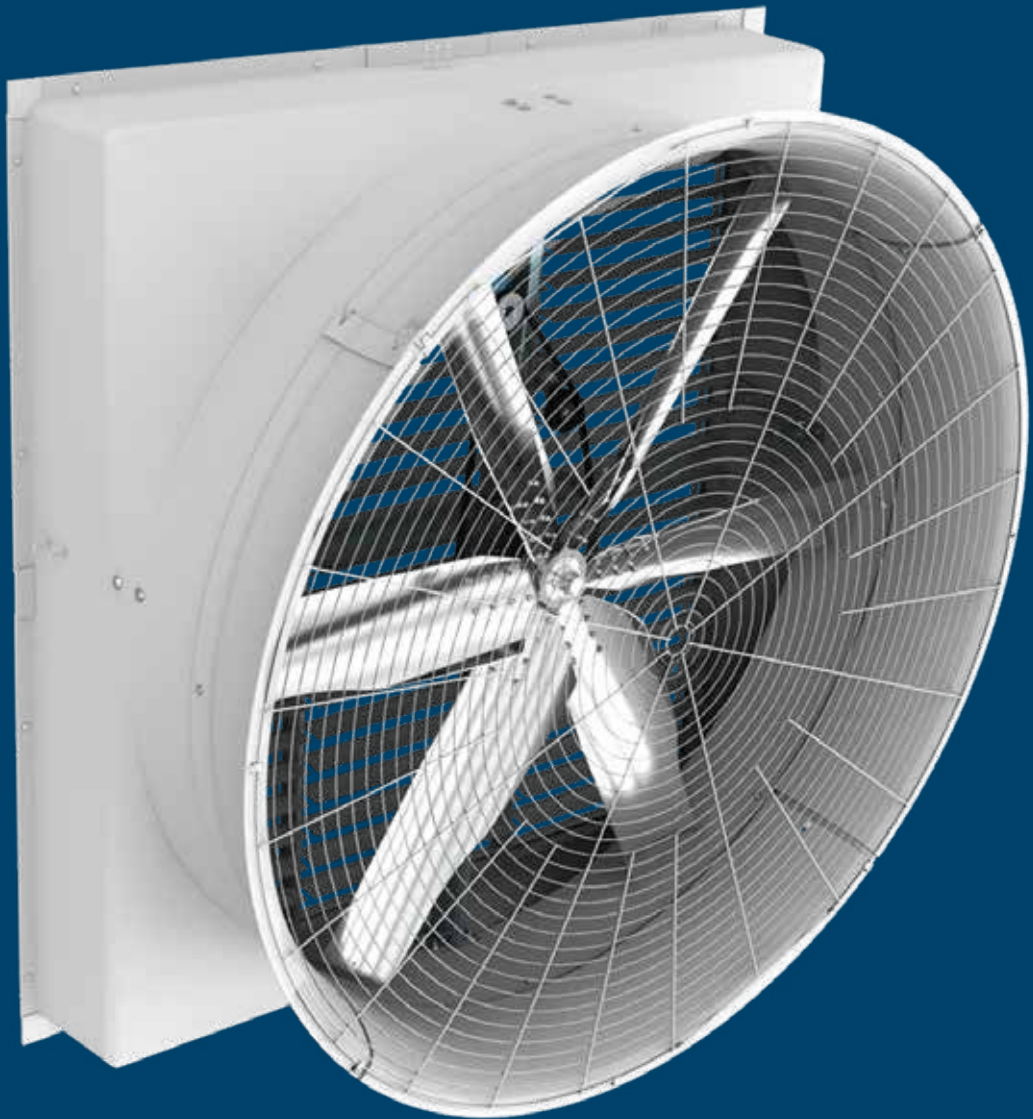




Thank you for choosing Topcool for your ventilation solution

GF-SERIES OWNER MANUAL



36'' - 84''

Please keep this manual

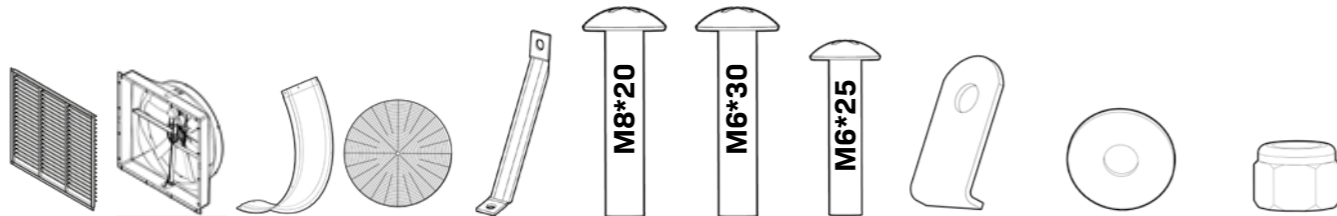
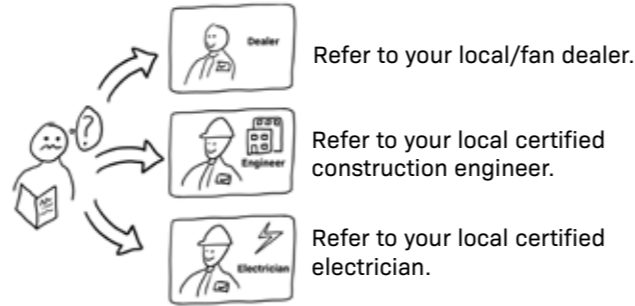
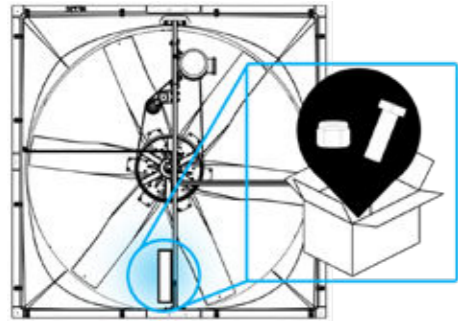
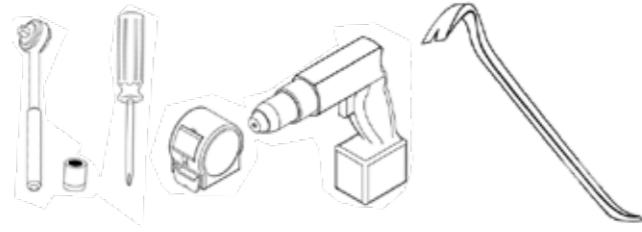
WARNINGS & RECOMMENDATION

Your local dealer has given you a recommendation for placement, orientation and operation. If you are unsure, then call your local dealer or contact Topcool manufacturing at 86-757-8886-1830 (beijing time) or directly on topcool's website for technical support.

IT IS UP TO YOU AS THE OWNER TO ENSURE THAT YOUR BUILDING IS MADE READY FOR THE SYSTEM.

You must hire a licensed and insured electrician and contractors to install this equipment. The installation is by design made simple for skilled tradesman. We advise that the receiving of this system be coordinated and verified to avoid lost time due to misplaced equipment.

RECOMMENDED TOOLS FOR INSTALLATION AND ASSEMBLY (NOT INCLUDED)



Part	A Shutter	B Fan Hub	C Cones	D Guard	E Bracket	F M8*20	G M6*30	H M6*25	I Net clip	J Washer Φ8* Φ25	K Washer Φ6* Φ20	M Lock nut							
Model*	BD / DD	BD / DD	BD / DD	BD / DD	BD / DD	BD / DD	BD / DD	BD / DD	BD / DD	BD / DD	BD / DD	BD / DD							
36"/91cm	1	1	2	1	-	-	4	8	-	4	-	20							
50"/127cm					2	-	2	6	6	9	9	6	6	2	-	24	24	15	15
55"/141cm					2	-	2	6	6	9	9	6	6	2	-	24	24	15	15
60"/152cm					-	-	-	6	-	9	-	6	-	-	-	24	-	15	-
72"/183cm					2	-	2*	6	6	12	12	9	9	2	-	27	27	18	18
84"/214cm					2	-	2*	8	8	12	12	8	8	2	-	32	32	20	20

*BD= Belt Driven model
DD= Direct Driven model

*M8*25 bolts

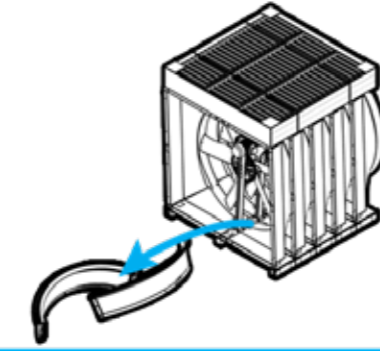
UNPACKING

Please read over all instructions carefully before you begin.
All illustrations are for references purposes only. Actual product may vary due to product size differences.

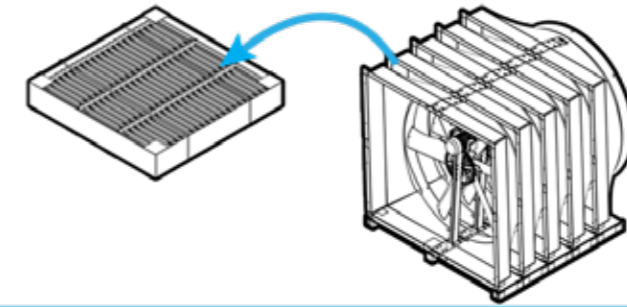
1

60" to 84" have the same steps of Unpacking

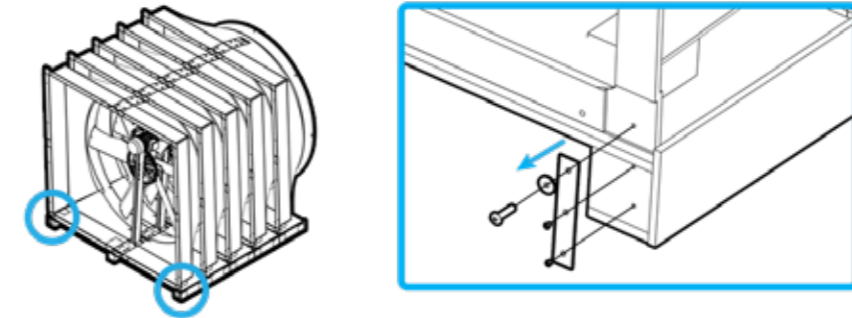
1



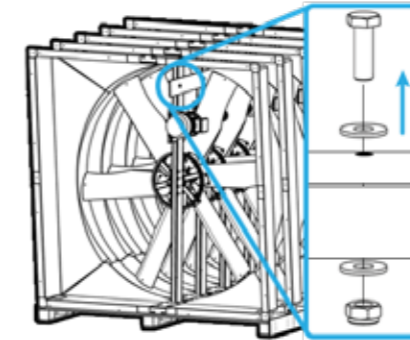
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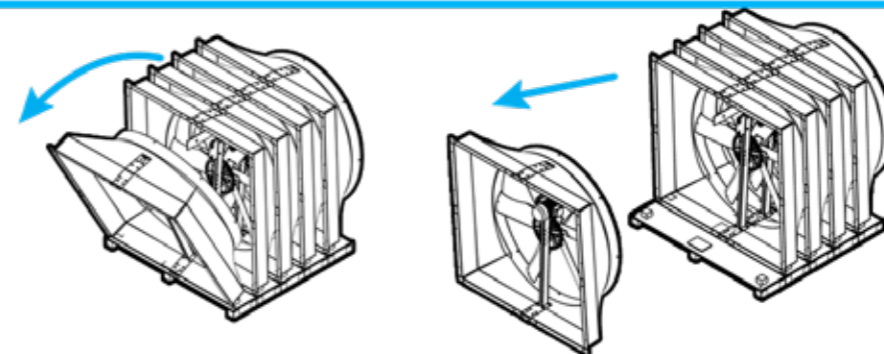
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4



5

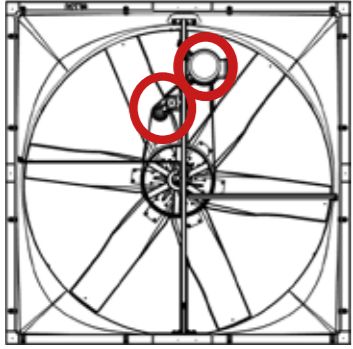


INSTALLATION & PREPARATION

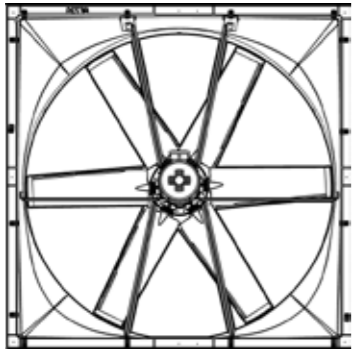
Please read all instructions carefully before you begin.

36" to 84" have the same steps of installation

1 Fans will come partially assembled with the motor already mounted. It will be at the top of the fan.



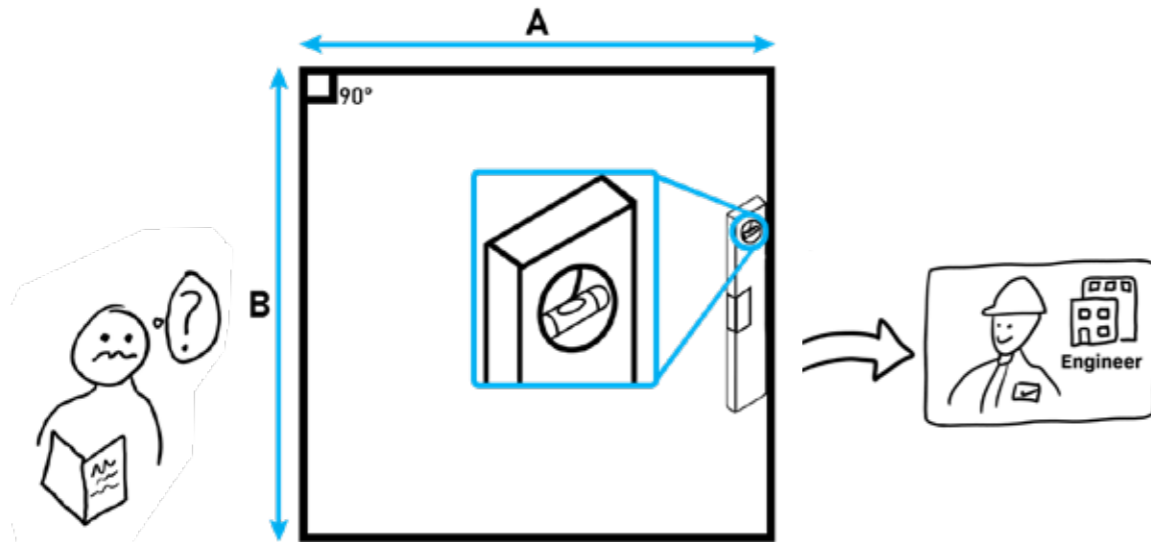
- When mounting the fan, it needs be in accordance with the relevant standard/ regulation of the local country.
- All electrical work must be done by a licensed electrician in accordance with all applicable electrical codes.
- Check sheaves and belts for alignment and tension in case they have moved during shipping. They should be adjusted if required (contact your local dealer).
- Inspect for defects or missing parts. Discrepancies shall be reported to your local dealer.
- Never insert fingers or any other objects through the fan when it is in operation.
- DO NOT use with an extension cord .
- DO NOT place fan or any parts near an open flame, or other heating appliances.
- Be sure the fan is securely mounted on the mounting bracket.
- DO NOT use fan in explosive environment.
- Keep away children from operating fans.



MAKE SURE YOUR BUILDING/WALL CAN SUPPORT THE WEIGHT OF THE GF. CONTACT YOUR LOCAL CONSTRUCTION ENGINEER.

Kg/Lbs	36"	50"	55"	60"	72"	84"
WEIGHT	52KG (115lbs)	70KG (154lbs)	100KG (220lbs)	150KG (330lbs)	180KG (397lbs)	230KG (507lbs)

2 Make sure all your wall opening is the right size for your fan dimension. Before making holes into your wall, **contact a building professional to ensure you do not damage your building structure.**

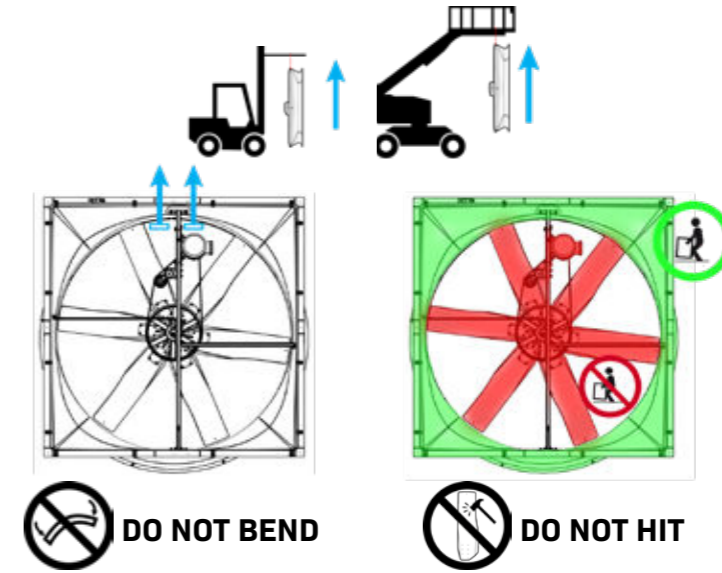


	Model					
	36"	50"	55"	60"	72"	84"
A	1110mm (~44")	1370mm (~55")	1490mm (~59")	1650mm (~65")	1970mm (~78")	2210mm (~88")
B	1110mm (~44")	1370mm (~55")	1510mm (~60")	1650mm (~65")	1970mm (~78")	2190mm (~87")

3

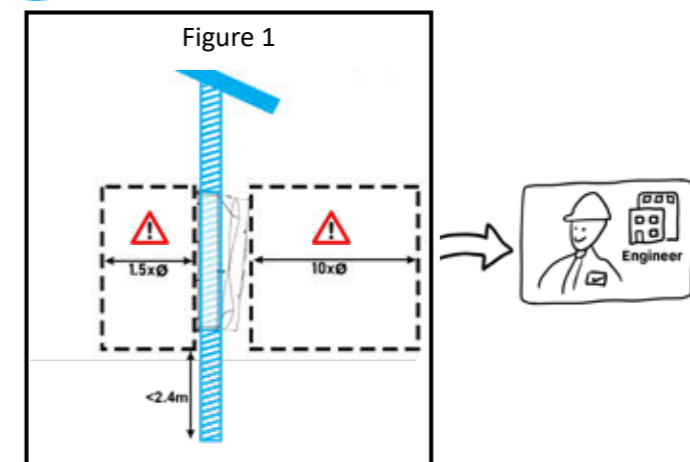
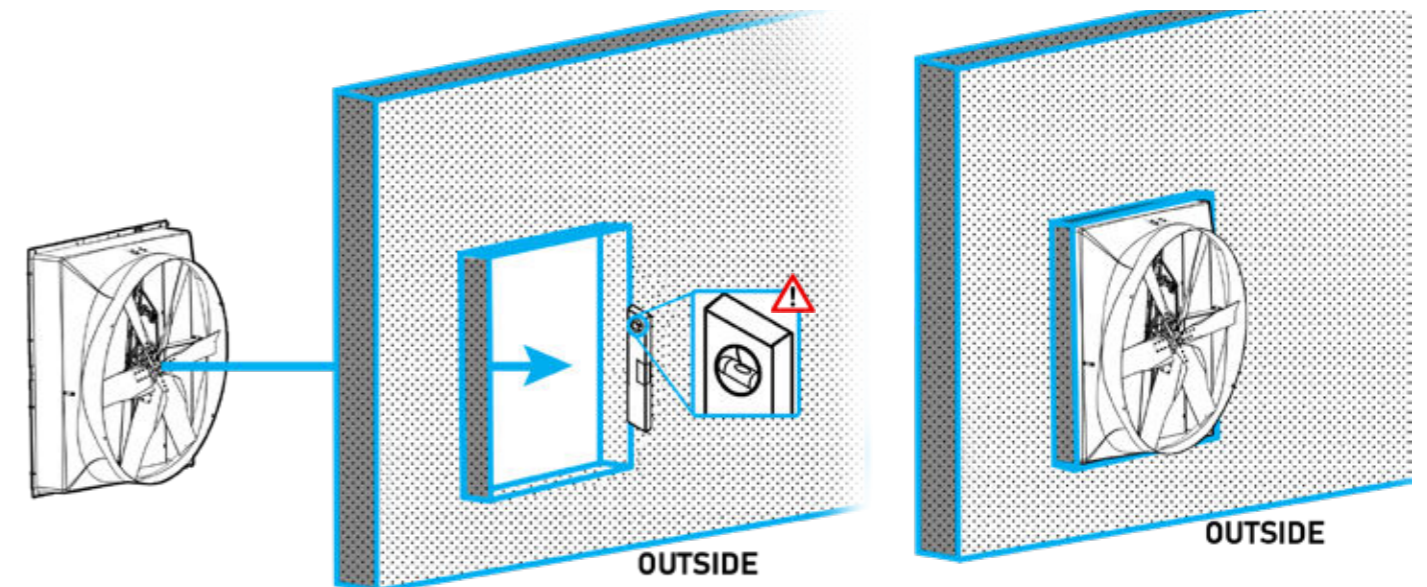
Using a lifting equipment, lift the fans into the wall opening. Lift up the fan by the green area.

- Protect the fan housing with wood
- Position the lifting equipment (chains, fork, etc.) close to each other so that they can pass between the fan blades.
- When lifting ensure the fan is secured and that it cannot slide along the forks, chains, etc.



4

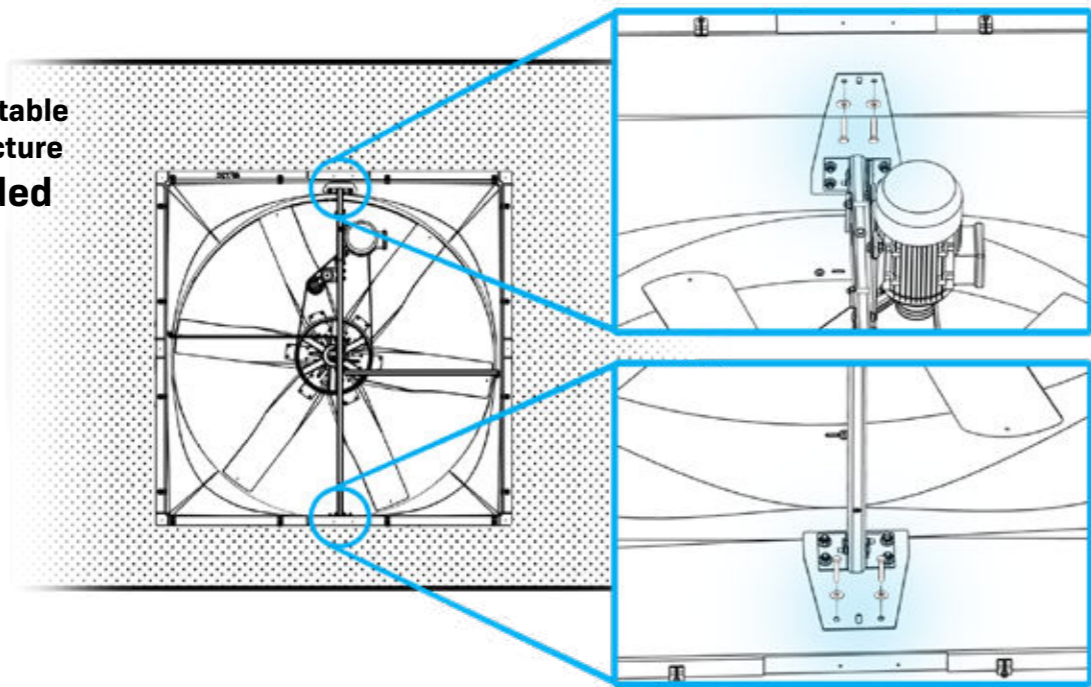
- The lip in front of the fan will sit tightly against the wall (inside the building).
- The round portion of the fan will stick out of the wall (outside the building).
- Make sur to leave a clearance space in front and behind the fan. (see fig. 1)



5



Hardware suitable for your structure not included



6

Careful to choose the right model of installation (BD or DD). Do not over tighten the bolts (Force ≤ 10 N/m).



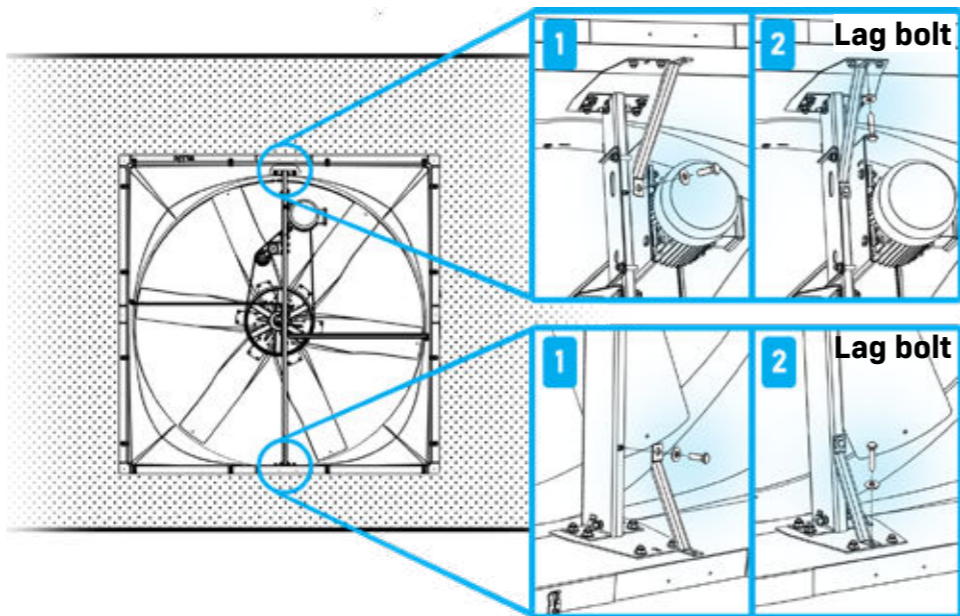
Hardware suitable for your structure not included

BELT DRIVE



Part	E Bracket	(NOT INCLUDED) Lag bolt + washer	F M8*20	J Washer $\Phi 8^* \Phi 25$
Model	BD	BD	BD	BD
36"/91cm	-	-	-	-
50"/127cm	2	6	2	2
55"/141cm	2	6	2	2
60"/152cm	-	-	-	-
72"/183cm	2	6	2*	2
84"/214cm	2	8	2*	2

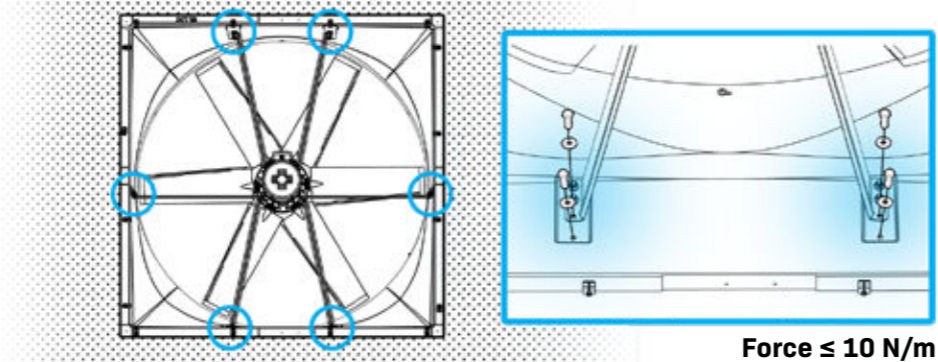
*M8*25 bolts



Force ≤ 10 N/m

DIRECT DRIVE

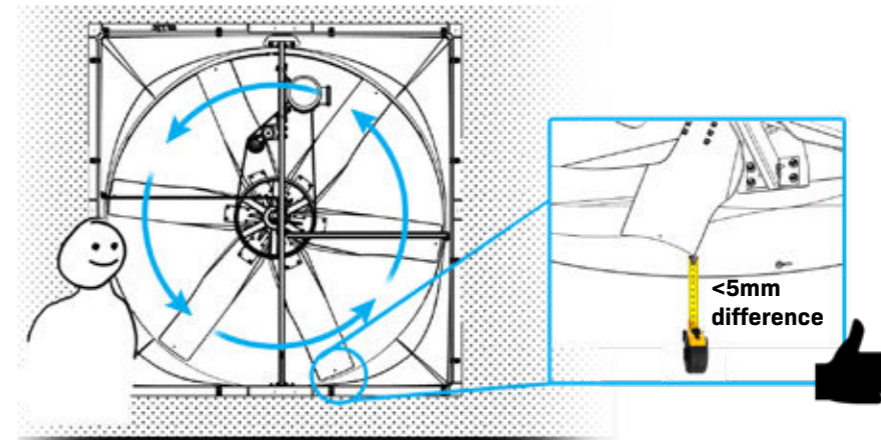
Part	(NOT INCLUDED) Lag bolt	Matching Washer
Model	DD	DD
36"/91cm	4	4
50"/127cm	12	12
55"/141cm	12	12
60"/152cm	12	12
72"/183cm	10	10
84"/214cm	10	10



Force ≤ 10 N/m

7

Remove the blade lock and try spinning the blades freely in the housing. Adjust fan position in the wall opening if required. Measure at the same point the spacement between outside housing & the blade, repeat the measure for all blades. A range >5 mm need adjustment.



8

Secure housing to the inside structure using hardware suitable for your structure (not included) and washers compatible with it.



Do not secure through the sidewalls of the housing



Do not distort the housing

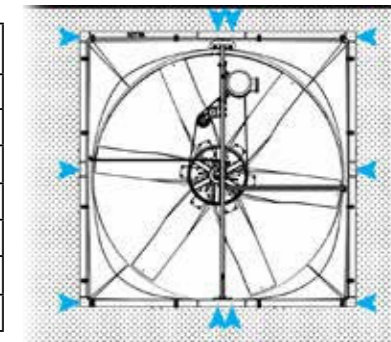


Venturi must not be distorted and prop must be able to rotate freely and not come in contact with the housing



Hardware suitable for your structure not included

	Lag bolt	Matching washer
Model*	BD / DD	BD / DD
36"/91cm	4	4
50"/127cm	6	6
55"/141cm	6	6
60"/152cm	8	8
72"/183cm	10	10
84"/214cm	10	10

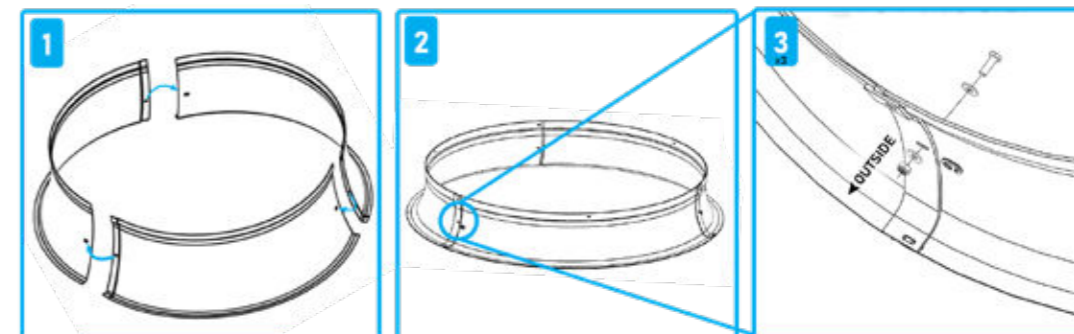


9

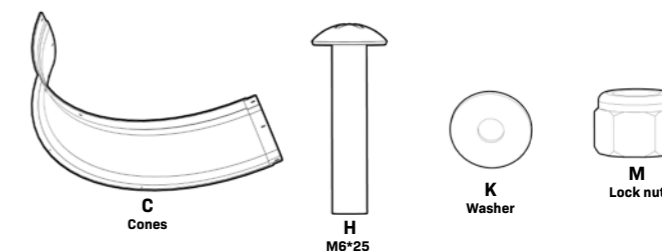
Do not tighten the bolts yet, wait until the cone is mounted on the fan.



RECOMMENDED

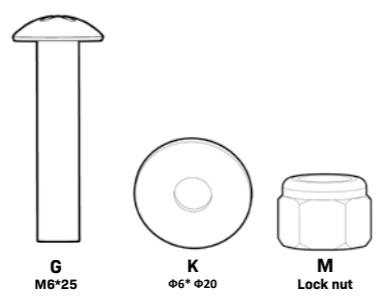
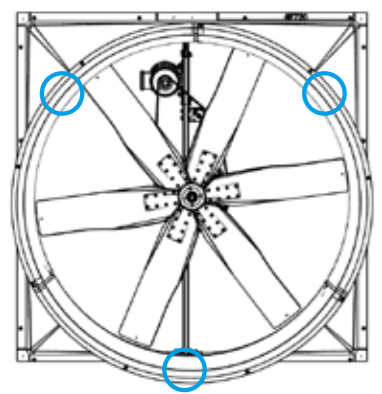
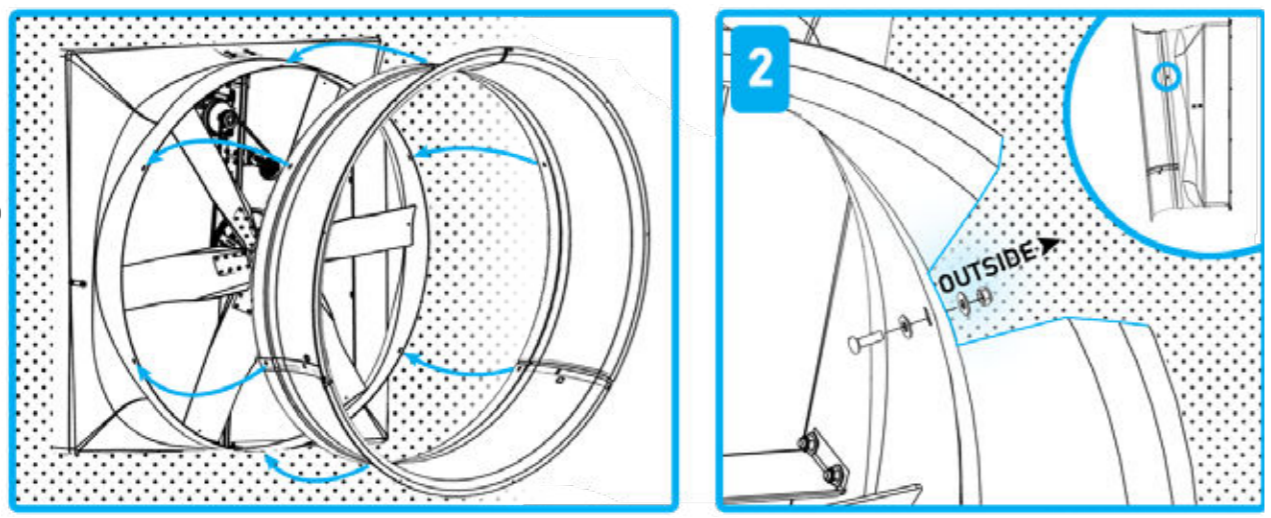


x Parts	C Cones	H M6*25	K Washer $\Phi 6^* \Phi 20$	M Lock nut
Model*	BD / DD	BD / DD	BD / DD	BD / DD
36"/91cm	2	2	4	2
50"/127cm	3	3	6	3
55"/141cm		3	6	3
60"/152cm		3	6	3
72"/183cm		3	6	3
84"/214cm	4	4	8	4



10
RECOMMENDED

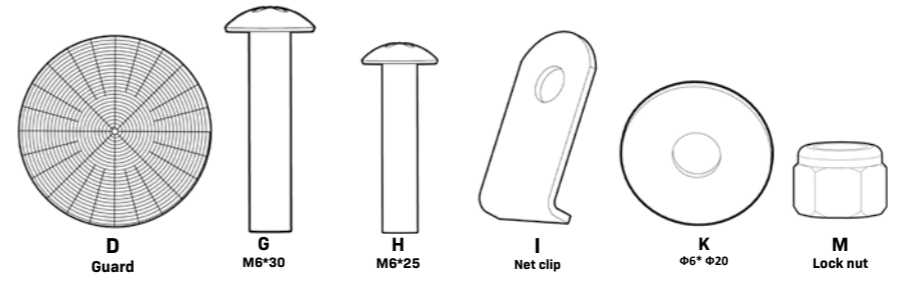
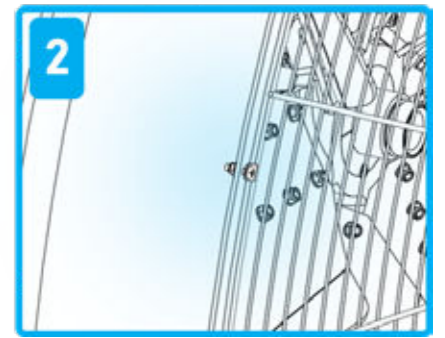
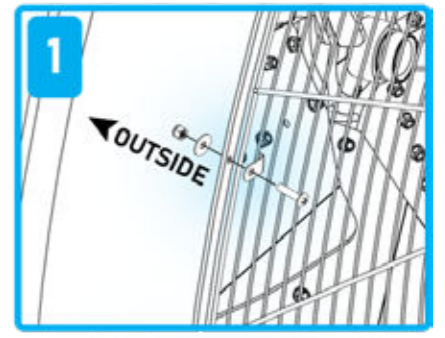
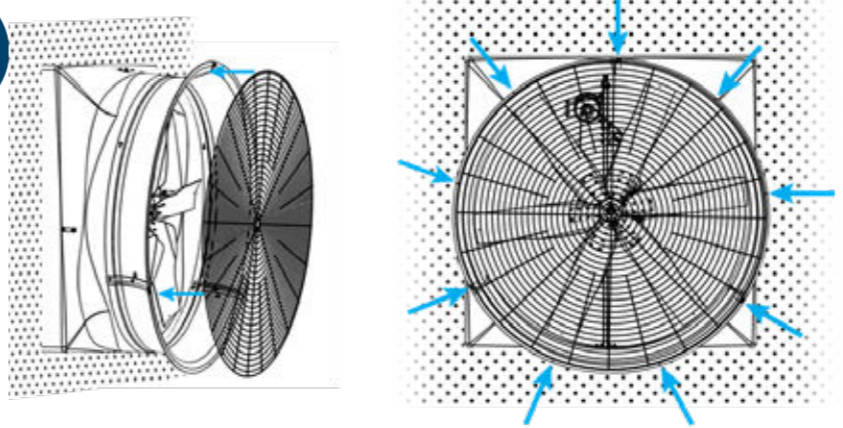
M8*25 bolts are smaller bolts; install them in the seamless holes of the cone onto the housing.



Part	G M6*25	K Washer Φ6* Φ20	M Lock nut
Model*	BD / DD	BD / DD	BD / DD
36"/91cm	4	8	4
50"/127cm	3	6	3
55"/141cm	3	6	3
60"/152cm	3	6	3
72"/183cm	3	6	3
84"/214cm	4	8	4

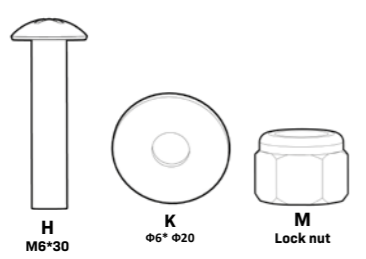
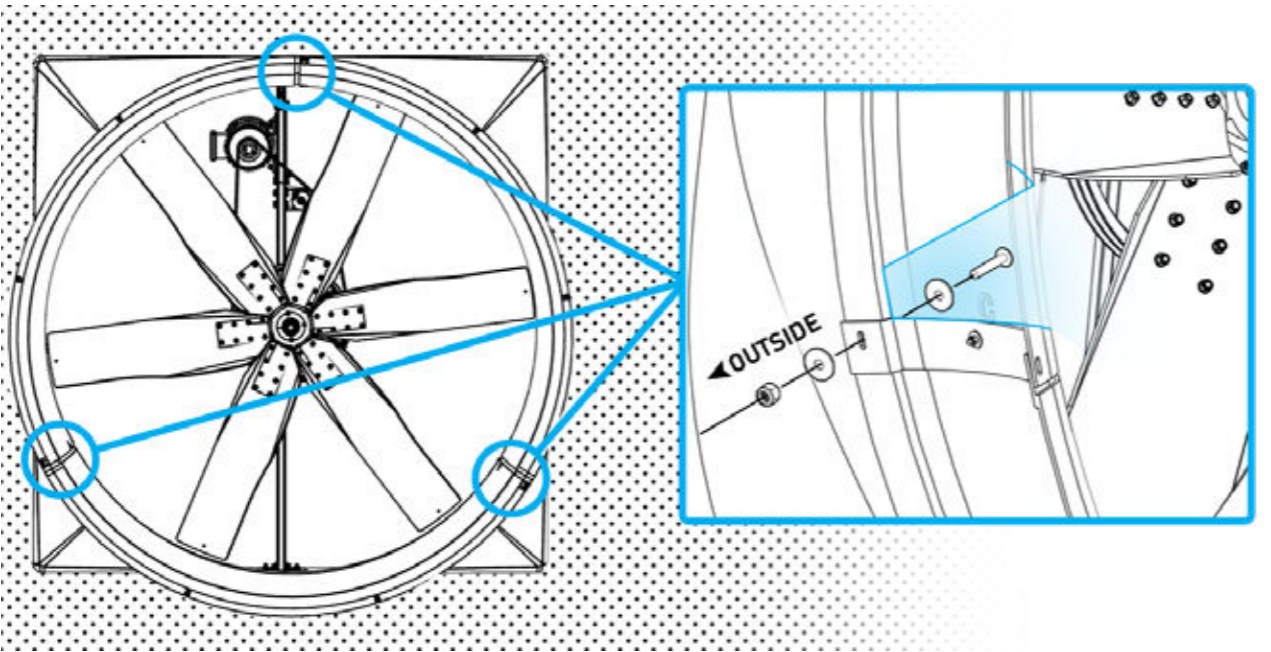
12

M8*30 bolts (longer one) will be installed where the end pieces of the cone meet.



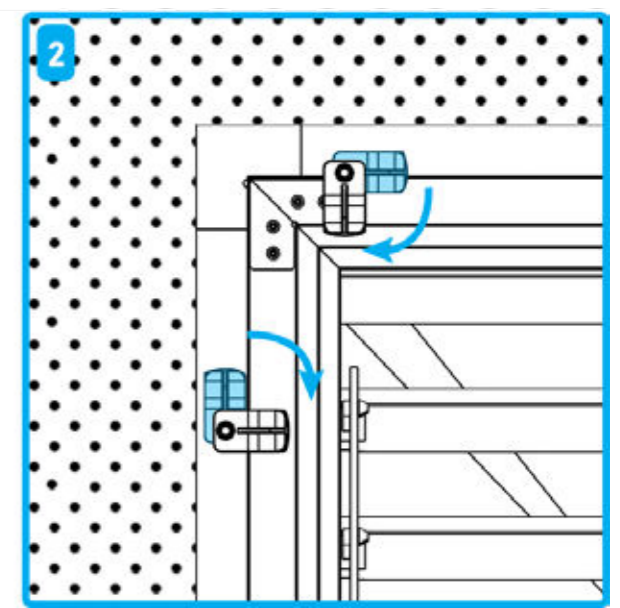
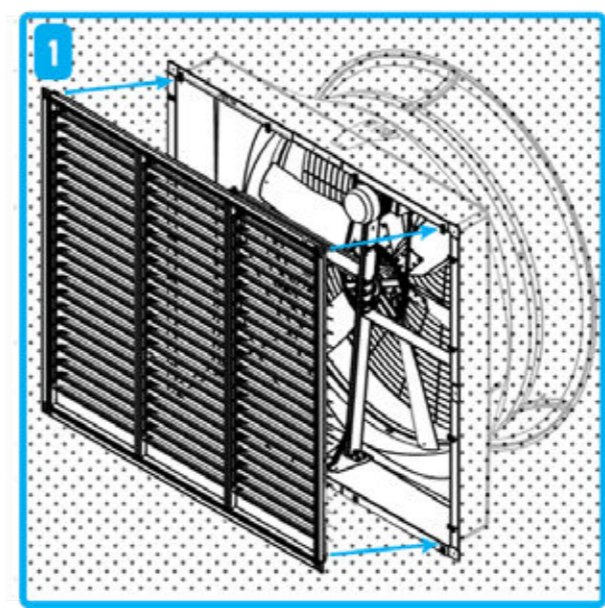
Part	D Guard	G M6*30	H M6*25	I Net clip	K Washer Φ6* Φ20	M Lock nut
Model*	BD / DD	BD / DD	BD / DD	BD / DD	BD / DD	BD / DD
36"/91cm	1	2	2	4	4	4
50"/127cm		3	3	6	6	6
55"/141cm		3	3	6	6	6
60"/152cm		3	3	6	6	6
72"/183cm		3	6	9	9	9
84"/214cm		4	4	8	8	8

11



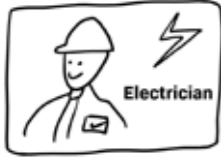
Part	H M6*30	K Washer Φ6* Φ20	M Lock nut
Model*	BD / DD	BD / DD	BD / DD
36"/91cm	2	4	2
50"/127cm	3	6	3
55"/141cm	3	6	3
60"/152cm	3	6	3
72"/183cm	3	6	3
84"/214cm	4	8	4

13



	36"	50"	55"	60"	72"	84"
# shutter clip	10	12	12	12	16	16

14 PLEASE CONTACT A CERTIFIED ELECTRICIAN TO INSTALL THE MOTOR AND THE DRIVE.



Variable Frequency Drive (VFD)

We suggest installing the Variable Frequency Drive (VFD) directly onto the housing of the fan and wire the motor while the fan is on the floor. Please refer to the mounting instructions of your VFD to mount it on the fan. We suggest wiring the VFD before lifting the fan at the required height.

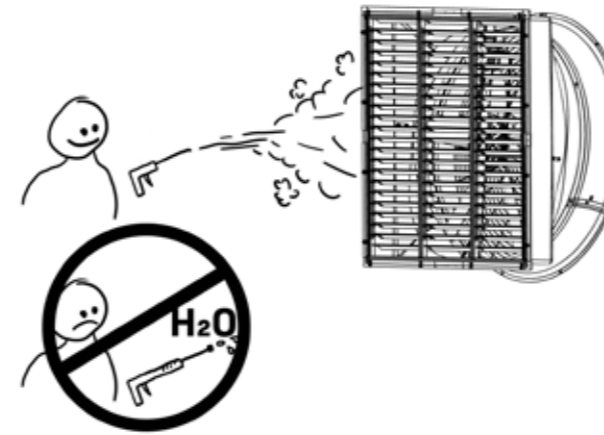
WARNING ELECTRICAL WIRING
BELT-DRIVEN & DIRECT-DRIVEN FANS

KEEP ELECTRICAL POWER OFF WHEN INSTALLATING

- 1) All wiring needs to be installed following your national, state, and local electrical codes.
- 2) Fans used to ventilate livestock buildings or other rooms where continuous air movement is essential, need to be connected to individual electrical circuits, with a minimum of two circuits per room.
- 3) **The user must provide an adequate backup and alarm system.**
- 4) For electrical connection requirement, refer to diagram on motor nameplate and information enclosed with the control to be used.
- 5) Route wires to motor with a drip loop and secure it. It will drain accumulated moisture away from the motor.
- 6) All motor overload protection should be provided for each fan. A circuit breaker switch must be used and must be located adjacent to each fan.
- 7) **BEFORE FIRST START-UP**, with electrical power off, verify that the fan propellers turn freely and that all the fasteners are secured. Turn on electrical power and confirm that the fan operates smoothly.
- 8) Failure to follow all of these precautions can result in severe injury or death.

99-0127-0

MAINTENANCE



Refer to the maintenance stickers located on the side of the fan, if you lose this manual.

1. **INSPECT PROPELLER:** check that propeller is secure on the shaft and that there are no signs of damage.
2. **CLEAN** regularly for best results (before each season);
 - Fan motor, remove any dust accumulation using a brush, cloth or air pressure (do not use water pressure washer).
 - Shutter, carefully clean dust from shutter, blades and the frame making sure the shutter opens and closes freely. (for GF model)
 - Guard, clean any dust or feathers off using a brush or air pressure.
3. **CHECK ALL FASTENERS** for safety, tighten if any loose connections.
4. **GREASE SHAFT BEARING** every 4-6 months, do not use more than 1 shot when greasing fan.
5. **CHECK DRIVE ALIGNMENT** to make sure the belt is centred on the idler pulley.
6. **CHECK PULLEY** if it has grooves in it or no longer smooth, then replace it.
7. **BELT & TENSIONING**, check condition of belt, if worn, replace it and verify alignment & tension.

FOR BELT DRIVEN FANS

WARRANTY

Topcool warrants every new fan to be free of defects and workmanship to the extent that, within 3 years from the date of purchase Topcool shall either repair or replace at its option (excluding belt). Therefore, any fan or part shall be returned to Topcool with pre-paid freight and found to be defective at Topcool facilities. A return authorization must be obtained, and proof of purchase may be required before any warranty work is started.

This warranty does not include any labour or transportation cost incidental to the removal and reinstallation of the unit at the user's premises. Components repaired or replaced are warranted through the remainder of the original warranty period only. This warranty applies to the original purchaser-user only.

Purchaser must maintain and use the equipment according to Topcool's recommendations. No parts will be covered due to the neglect of maintenance on equipment, nor due to electrical surges, lightning or other acts of nature. The purchaser shall hold harmless from any claim or loss. Claims may be filed under this warranty and repairs shall only begin after the product is paid. This warranty does not cover inconvenience, loss of time, revenue, livestock, poultry or other consequential damages of any kind.

The limited warranty is given in partial consideration of the time of purchase and is the only warranty offered. There shall be no other warranty either expressed or implied which apply to this purchase.