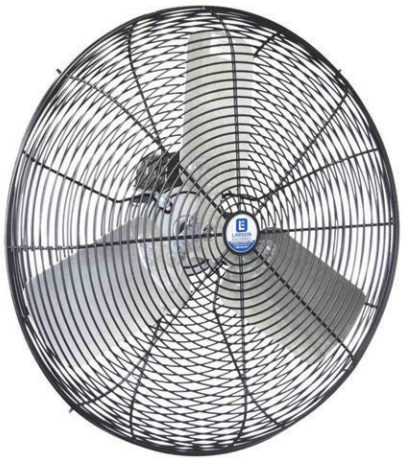


Universal Circulation Fan Operators Manual

IMPORTANT: READ AND SAVE THESE INSTRUCTIONS

Read all instructions carefully before attempting to assemble, install, operate or service the product described. Failure to comply with instructions could result in personal injury and/or property damage.

Using this product for any other purpose than it was intended, or not within the operating specifications in this manual will void the warranty and may cause damage to the fan or serious injury to personnel.

WARNING - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK:

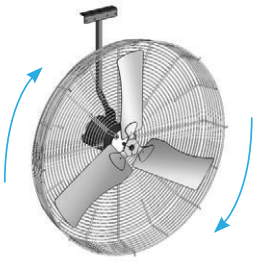
- Do not expose fan to water or rain.
- Do not use this fan with any speed control device unless otherwise noted.*

INSTRUCTIONS FOR WIRING

Fans pre-wired with 120V 3-prong power cord unless noted otherwise (see product nameplate):

- The power source must conform to the electrical requirements of the fan.
- The power cord has a 3-prong grounded plug that must be plugged into a GFCI (Ground Fault Circuit Interrupter) protected circuit.
- Do not alter the plug to remove the grounding prong and never use a two prong adapter.
- Replace damaged or worn power cords immediately.
- Where possible, avoid using extension cords. If one must be used, the cord must be UL listed, be the proper size (Amp rating), and have 3-prong grounded connections.

CAUTION:
ALL ELECTRICAL WORK SHOULD BE COMPLETED BY QUALIFIED ELECTRICIAN AND MEET ALL NATIONAL, STATE AND LOCAL CODES.



Blade Rotation

Fans not factory wired (customer supplied power cord or hard-wired installations):

- Wiring should only be done by a trained electrician to prevent injury or death.
- Configure internal wires to match supply voltage and wire according to motor nameplate. Test to verify correct rotation.
- Many of the electric motors in our fans are reversible. Make sure the fan is rotating in the proper direction. Follow instructions on the motor label to change rotation if necessary.
- Proper blade rotation: blade must spin clockwise when viewing the fan as shown (viewing the fan with the blade in front and the motor in back).
- Larson recommends installing a lockable disconnect switch near each fan.
- Route wire to motor with drip loop and secure. Drip loop will drain accumulated moisture away from the motor.
- Only permit power to unit when motor cover plate and all guards are properly installed to prevent injury.

KEEP THIS MANUAL IN A CLEAN, DRY PLACE FOR FUTURE REFERENCE.

All information, illustrations and specifications in this manual are based on the latest product information available at the time of printing. Product specifications subject to change. We reserve the right to make changes at any time without notice.

If you need replacement parts, please contact your dealer. Take special care when ordering replacement blades and motors to ensure you get the proper configuration for your fan. If you do not have that information, please call Larson Electronics at 800-369-6671 for assistance.

GENERAL SAFETY INFORMATION

- This fan is intended for general use only. Do not use near hazardous or explosive materials or vapors. Before operating this fan, check for worn, damaged, or missing parts and replace or repair as needed. To avoid risk of fire, electric shock or personal injury, disconnect from power source before servicing.
- Never insert fingers or any other objects through the guards when fan is in operation.
- Never operate fan without guards in place. Certain fans have guards that are not OSHA compliant. These units are designed to be intrinsically safe, however, never allow children near fan when in operation. Larson recommends these fans be installed greater than 7 feet from the ground.
- Unplug the fan before moving from one location to another. Fan must be located in an area that allows for adequate air flow around the fan.
- Starving the fan of air may cause the motor to overheat and trigger the unit to shut off. Fan motor is thermally protected and will shut off if overheated. Turn unit off and allow motor to cool before restarting. Carefully read all safety messages in this manual and on your equipment safety labels. Warning labels must be kept in good condition and be replaced if necessary.
- Follow recommended precautions and safe operating practices.

UNPACKING YOUR FAN

- Visually inspect the unit for any damage that may have occurred during shipping.
- Contact your shipper immediately if any damage is found.


Ceiling Mounts

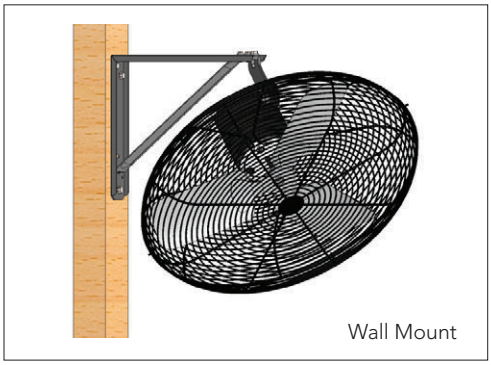
INSTALLING YOUR FAN

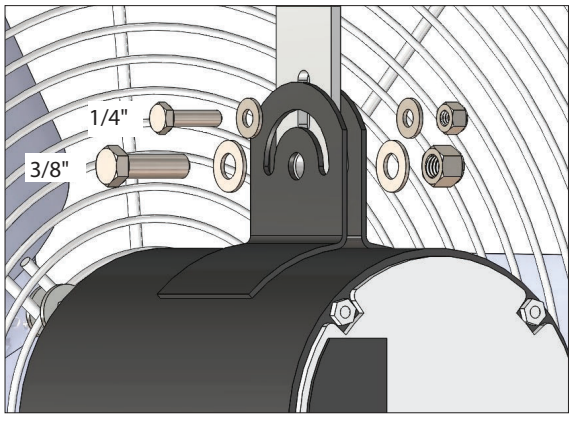
Many circulation fans include a fan mount. Additionally, a variety of wall mounts and ceiling mounts for permanent installations are available as well as pedestals and a fan cart for mobile / free-standing applications.

Wall and ceiling mounts must be installed on a support structure strong enough for the added weight of the mount and fan assembly. The customer is responsible for determining that their structure is adequate to support these loads.

MOUNTING HARDWARE

The hardware to attach the fan mount to the support structure is not supplied. Hardware must be adequately sized and be the proper type for your installation to safely support the fan. Always follow the fastener manufacturers installation instructions.


Wall Mount



ATTACHING THE FAN TO THE MOUNT

Use the supplied hardware that came with your fan to attach it to the mount. The 3/8" hardware installs through the center hole of the motor yoke bracket. The 1/4" hardware fastens through the slot feature. Adjust the fan to the desired angle and securely tighten all mounting hardware.

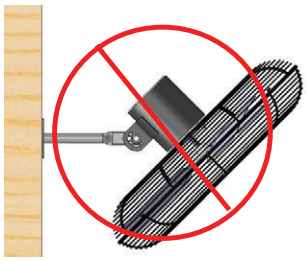
Fan mount designs may vary. Fan must always be attached to the mount through center hole of the motor yoke bracket using 3/8" hardware.

CAUTION: Fasteners may loosen over time. It is important to check and tighten fasteners frequently.

CAUTION: Inspect fan components and fasteners frequently for corrosion. Replace any corroded fasteners or parts.

WARNING: INCORRECT MOUNTING CONFIGURATIONS

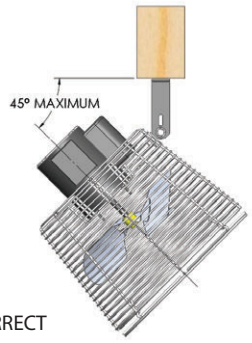
Do NOT mount ceiling brackets horizontally. The ceiling brackets were not designed to be mounted this way. Mounting the bracket and fan this way carries a risk of damage to fan and/or property, and a danger to people and/or animals. Mounting the bracket this way will void the warranty.



INCORRECT

12" AND SMALLER CIRCULATION FANS

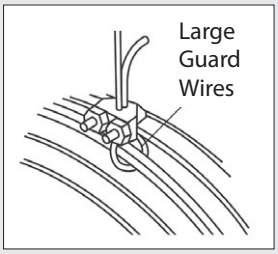
Do NOT mount fan at an angle greater than 45 degrees as shown. The motor bearings in these units are not suitable for operation beyond this angle.



CORRECT



INCORRECT

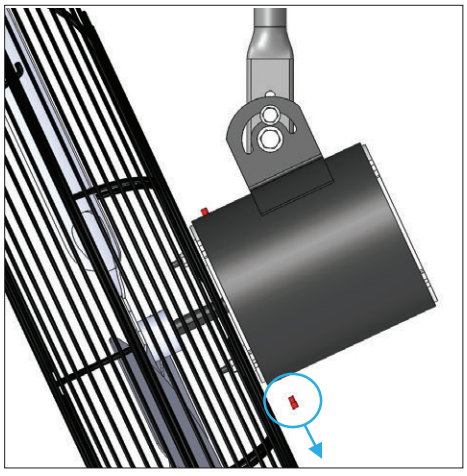


Safety Cable: (*Safety Cable Kit sold separately.)*

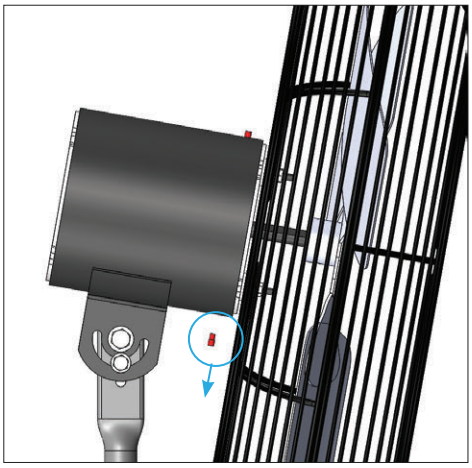
A SECONDARY SUPPORT CABLE SHOULD BE INSTALLED ANYTIME THE FAN IS MOUNTED OVERHEAD FOR ADDITIONAL SAFETY.

Safety Cable must go around the Large Diameter Wires of the Front and Rear Guards.

The other end of Safety Cable must be securely fastened to a building joist, truss, or beam near the fan. Take up all unnecessary slack in the cable.



Ceiling mounted fan drain plug removal



Pedestal mounted fan drain plug removal

REMOVE MOTOR DRAIN PLUGS

- After installing the fan, remove the motor drain plug located at the lowest point of the motor.
- Failure to remove the drain plug may allow condensation to build up inside the motor, reducing motor life and will void the warranty.
- Do not remove drain plugs on the top side of the motor.
- Drain plug locations and quantity may vary by motor design.

MAINTENANCE

The fan you have purchased is built with heavy duty components, designed to give you many years of worry-free performance. Like anything else that is mechanical, your fan will require a small amount of periodic maintenance to assure maximum efficiency.

Disconnect power before cleaning or maintaining your fan in order to prevent serious injury or death.

- Some maintenance procedures may require removal of fan guarding.
- After servicing, guards and other safety devices must be reinstalled per their original condition.
- Excessive dust and debris may cause overheating and reduced fan performance.
- Keep guards, motor and blades clean by vacuuming or wiping with a damp cloth.
- Do not use harsh chemicals or cleaners to clean any part of the fan.
- Pressure washing the unit will void the warranty.
- Sealed motor bearings are pre-lubricated and do not require servicing.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
Fan does not operate	1. Fan not plugged in 2. Blown fuse or tripped circuit breaker 3. Defective on/off switch 4. Defective motor 5. Fan blade contacting housing	1. Check power cord connection 2. Replace fuse or reset circuit breaker 3. Repair or replace switch 4. Repair or replace motor 5. Realign fan blade in fan housing
Insufficient airflow	1. Guards excessively dirty 2. Blade and motor excessively dirty	1. Clean inlet and outlet guards 2. Clean blade and motor
Excessive noise	1. Fan blade contacting housing 2. Defective motor bearings 3. Loose guards	1. Realign fan blade in fan housing 2. Repair or replace motor 3. Tighten guard fasteners
Excessive vibration	1. Damaged fan blade 2. Motor shaft bent 3. Motor loose	1. Replace fan blade 2. Repair or replace motor 3. Realign if necessary and tighten fasteners