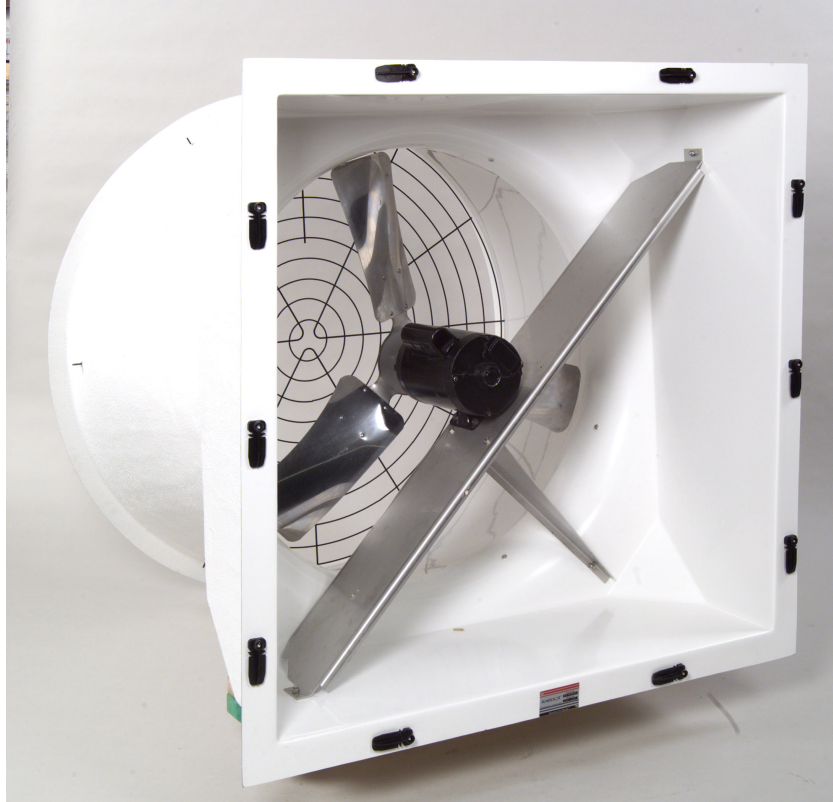
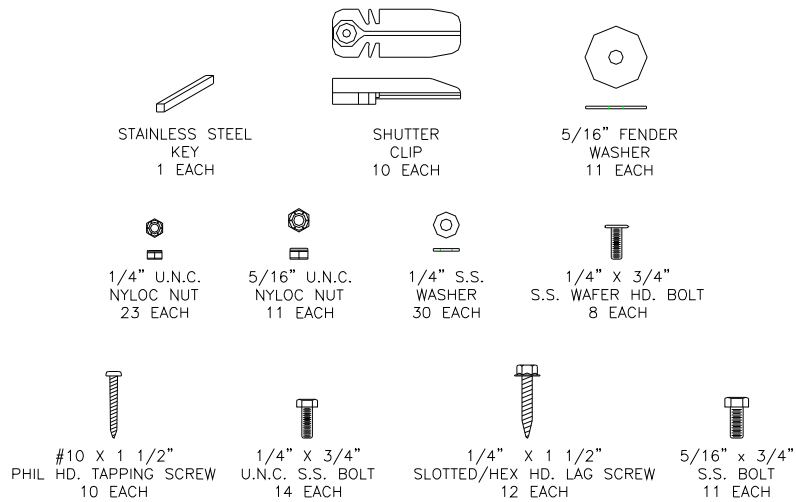


RAYDOT PMC-36" DIRECT DRIVE FANS



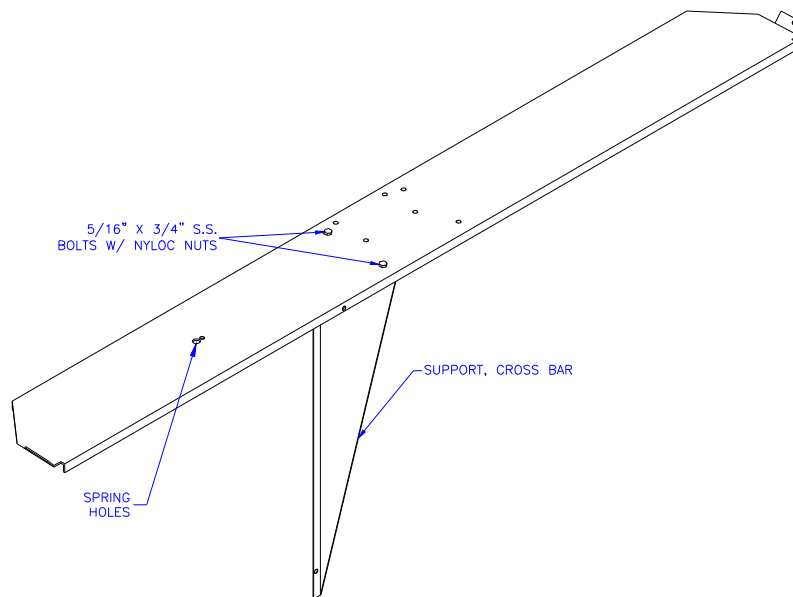
Step 1.

Unpackage and become familiar with all of the fan components and hardware. The legend below will help to familiarize you with the hardware required for this assembly.



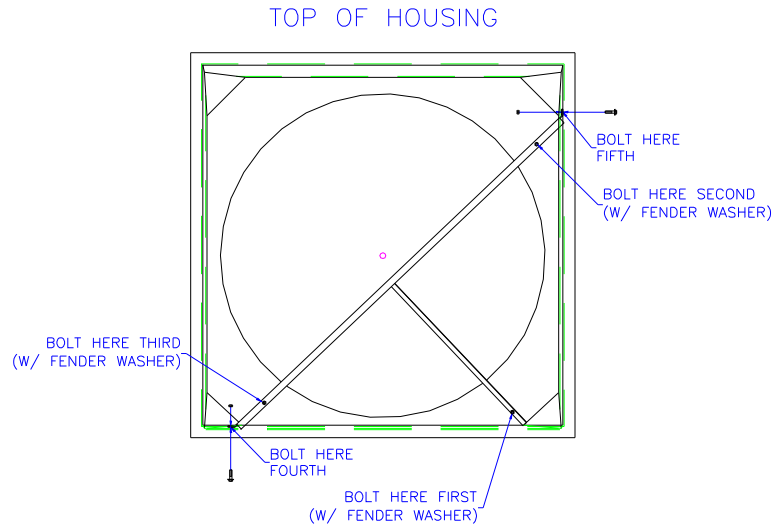
Step 2.

Mount the cross bar support to the cross bar using two 5/16" x 3/4" bolts with nyloc nuts using the two holes nearest the two spring holes.



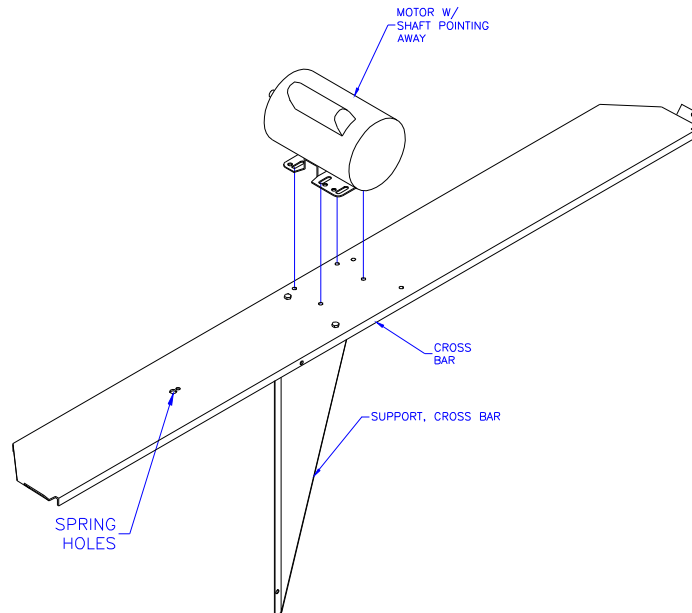
Step 3.

Mount the cross bar / cross bar support assembly to the housing using 5/16" x 3/4" bolts with nyloc nuts and fender washers where noted. Bolt heads shall be on the outside of the housing.



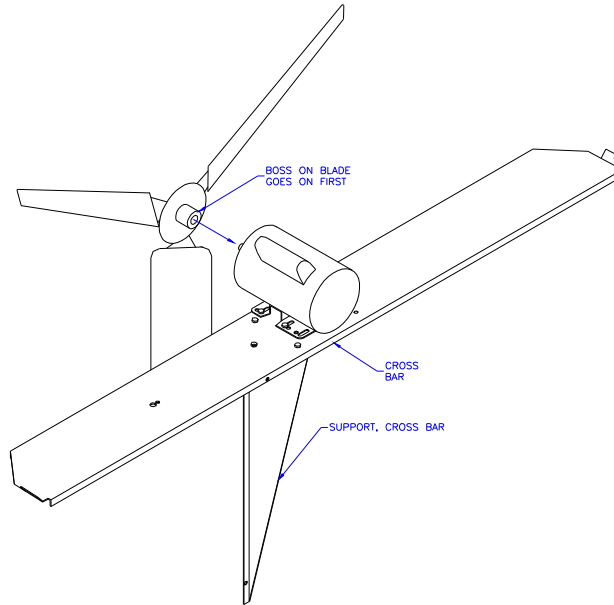
Step 4.

Mount the motor to the cross bar assembly using four 5/16" x 3/4" bolts and nyloc nuts. The nuts and bolts shall be left slightly loose so the fan blade may be centered later in the assembly process.



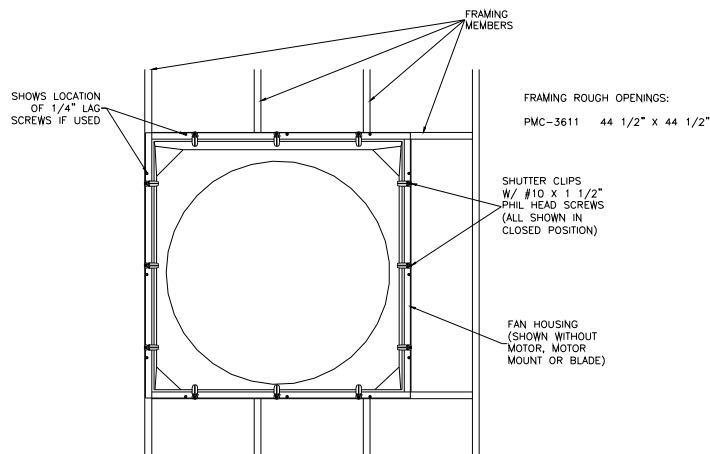
Step 5.

Install the fan blade onto the motor shaft. Ensure that the boss on the blade hub goes onto the shaft first and keep the shaft end flush with the blade hub. Install the key into the key way and tighten the blade set screw to the shaft using a 5/16" opened end wrench. (If using a cast aluminum blade, equally tighten the 1/4" – 20 screws on the face of the "H" bushing.) Center the fan blade in the orifice by moving the motor and tighten the motor bolts while keeping the blade centered.



Step 6.

Install the assembled fan into the wall, taking care that the housing slopes downward. Use the shutter clips and the self tapping #10 x 1 1/2" phillips head screws to fasten the fan to the wall. Take care to screw the shutter clips through the predrilled shutter clip holes in the fan housing. Install the shutter after making sure the shutter vanes open upward and shutter clips rotate easily. Additional 1/4" x 1 1/2" slotted/hex head lag screws can be used to fasten the fan to the wall if desired. Make sure the lag screws go through the housing flange at a point they will not interfere with the shutter frame or the shutter clips.

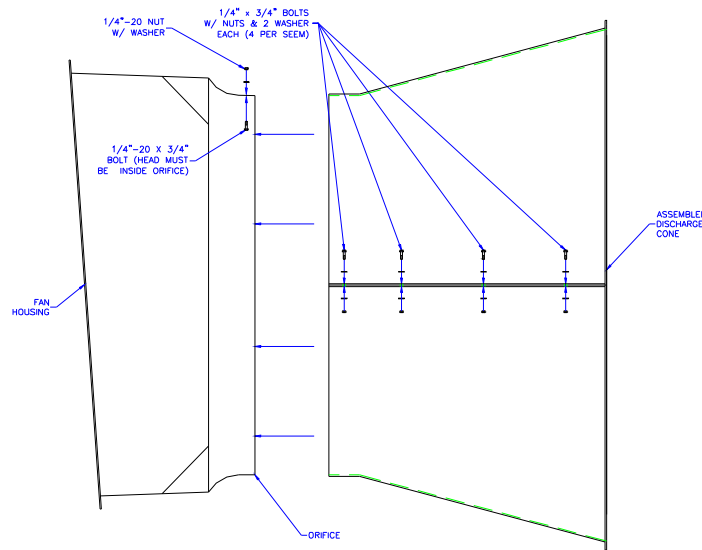


Step 7.

Assemble the discharge cone using four 1/4" x 3/4" bolts and nuts with washer on each of the standing seams.

Step 8.

Mount the assembled cone onto the fan housing (this shall be done after the fan housing has been installed into the wall). Use the remaining eight 1/4" x 3/4" bolts with nuts & washers to fasten the cone to the fan housing. The bolts must be inserted from the inside of the fan orifice through the cone so that the washer and nyloc nut are on the outside. This is very important that the bolt head is the only thing inside of the orifice to reduce the risk of the fan blade hitting anything.



Step 9.

After the cone has been mounted to the fan housing, install the guard screen into the discharge cone using 6 1/4"-20 x 3/4" bolts, washers and nyloc nuts. Note that the bolt head and washer shall be to the inside against the guard screen loop and the nyloc shall be on the outside of the cone.

Step 10.

Install the shutter onto the fan housing on the inside of the building. When installing the shutter, make sure the shutter vanes open upward.

FAN MAINTENANCE

CAUTION: Disconnect electrical power before servicing fan.

Inspect propeller: Check to see that the propeller is secure on the shaft and that there are no signs of damage.

Fasteners: Retighten nuts and bolts on a quarterly basis.

Clean Fan:

Motor: Remove any dust accumulation from motor using a brush or cloth. (DO NOT USE A PRESSURE WASHER ON THE MOTOR) A clean motor will run cooler and last longer. Check if the motor is secure in its mount.

Shutter: Carefully clean dust from shutter vanes and frame so that shutter opens and closes freely. If shutters are extremely dirty you can lose up to 45% of your fan capacity.

Guard: Clean any dust or dirt buildup from fan guards using a brush. Dirty guards can also reduce air flow.

Housing: Remove dust and dirt accumulations from housing with a pressure washer.

Inspect Fan Controls: All controls should be inspected every six months to assure optimum protection of your ventilation system.

- Check all covers for a tight fit.
- Wipe enclosures with a damp rag to remove dirt and dust.
- Clean sensors with a damp rag to remove dirt and dust. Be very careful not to damage sensors.
- **NEVER CLEAN ELECTRICAL EQUIPMENT WITH A POWER WASHER!**

WIRING DIAGRAM: Be sure power is “OFF” before doing any wiring. All wiring will be installed in accordance with national, state and local electrical codes. Fans used to ventilate livestock buildings or other rooms where continuous air movement is essential should be connected to individual electrical circuits. For electrical connection requirements, refer to diagram on the motor nameplate or the enclosed wiring diagram. Motors are pre-wired for 230 volts. Motor overload protection should be provided for each fan. A circuit breaker switch or slow blow motor type fuse must be used.

Specifications subject to change without notice.

NOTE: A safety cut-off switch should be located adjacent to the fan.

PROPER SHUTTER INSTALLATION: When installing the shutter, make sure the shutter vanes open upward.

WARNING If these ventilation products are used to support life in agricultural structures where failure of the system could result in loss or injury, the user must provide an adequate backup and alarm system. The user must accept all risks of such loss or injury due to the possible failure of the ventilation system.

CAUTION Do not install fan with moving parts within seven feet of floor or grade level without a guard that complies with OSHA Regulations. Do not use unless electrical wiring complies with all applicable codes. Do not wire without providing for power source disconnect at the fan itself. Do not service except by a qualified maintenance technician and only after disconnecting the power source. Do not install in room where flammable material is stored or flammable vapors might build up. Failure to observe all of these precautions can result in serious injury or death.

SERVICE AND TECHNICAL ASSISTANCE

Your dealer or the Raydot Service Department will be happy to answer all technical questions which will improve your use of the Power Miser series fan. Be prepared with the model number and necessary information before you place a call to your dealer or Raydot L.L.C. If your fan requires service when the warranty period has expired, please contact your dealer for assistance or return the unit to Raydot L.L.C. for repair.

Inquiries



Raydot & ValAir are Divisions of VALCO Companies

P.O. Box 117
210 E. Main Street
Coldwater, OH 45828