



**BALTIMORE
AIRCOIL COMPANY**



Fan Guard

Fan Guard

**ASSEMBLY INSTRUCTIONS FOR
INDUCED DRAFT PRODUCTS**



Fan guard(s) must be securely in place before operating the unit. Follow the fan guard installation instructions in this document to ensure that the fan guard(s) are properly installed. Contact your local BAC Representative if you have questions or need additional information.



- **DANGER:** Rotating equipment will cause severe personal injury or death to persons who come in contact. Do not perform any service on or near the fans, motors, and drives, or inside the unit without first ensuring that the fans and pump motors are disconnected, locked out, and tagged out.
- **DANGER:** On installations where there are multiple adjacent cells which may be traversed to gain access to another cell, all fan motors must be disconnected, locked out and tagged out, including those on adjacent cells, before performing any service on or near the fans and drive systems, and before traversing adjacent cells. Failure to follow this instruction may result in serious injury or death caused by contact with rotating equipment.
- **DANGER:** If the fan guard is removed or if the fan guard installation is altered for any reason, the fan guard must be reinstalled properly in accordance with the instructions contained in this manual before operating the fan. Failure to follow this instruction may result in serious injury or death caused by contact with rotating equipment.



Visit www.BaltimoreAircoil.com/FanGuard for the most up to date Fan Guard Installation Instructions.

Fan Guard Installation for the Series 3000 and Series 5000 Cooling Towers; FXV3 Closed Circuit Cooling Tower; and CXVT Evaporative Condenser



Fan Guard

3000, 5000, FXV3, CXVT
One-Piece Fan Guard

Due to height limitations on truck shipments, the fan guard may ship unmounted. **Never step or walk on the fan guard.** Refer to **Table 1** for the number of fan guard pieces the units will have .

Model Number	Number of Fan Guard Pieces
S3E/XES3E-8518-xxx, S5E-8518-xxx	1
S3E/XES3E-1020-xxx, S3E/XES3E-1222-xxx, S3E/XES3E-424-07x, S5E-1020-xxx, S5E-1222-xxx, S5E-1424-07x, FXV3-1224-xxx, CXVT-x-1224-x and CXVT-x-1424-x	2
S3E/XES3E-1424-12x, S3E/XES3E-1424-13x, S3E/XES3E-1424-14x, S5E-1424-14x, FXV3-1426-xxx, CXVT-x-1426-x and CXVT-x-2826-x	4

Table 1. Number of Fan Guard Pieces

One-Piece Fan Guard (Not Applicable for the FXV3/CXVT)

Mount fan guard to unit as illustrated in **Figure 1, Detail A**, at each mounting location around the guard perimeter.

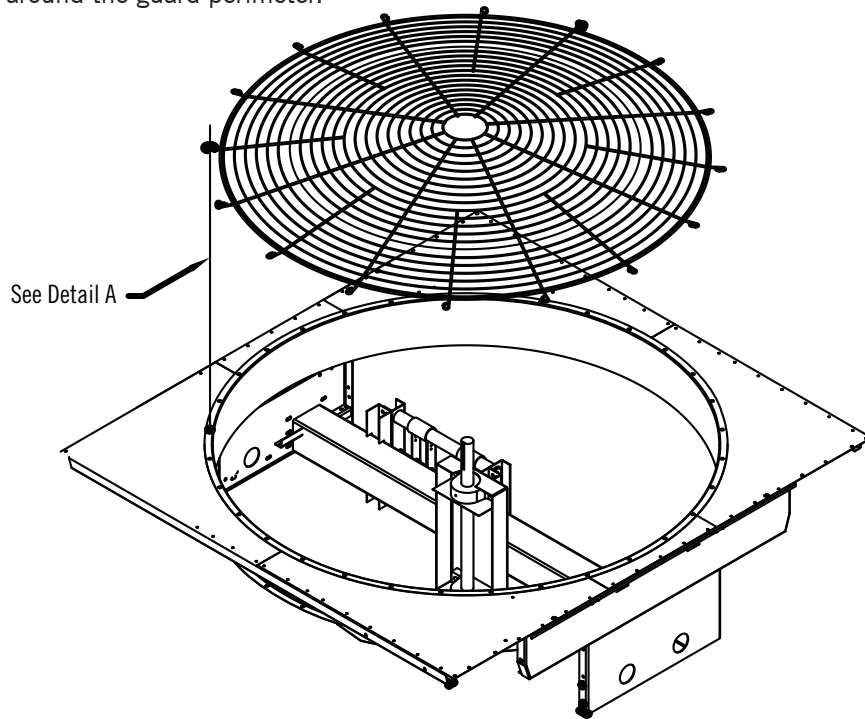
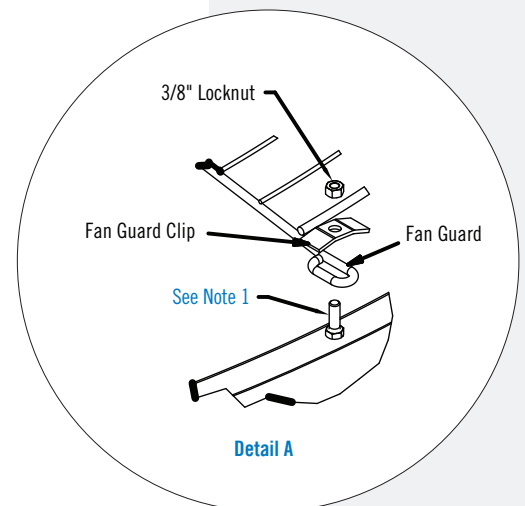


Figure 1. One-Piece Fan Guard Assembly



DANGER: Fan guard must be securely in place before the unit is placed in operation. Never step or walk on the fan guard. Failure to follow these instructions may result in serious injury or death.



NOTE:

- Existing 3/8" stud and nut for guard mounting at fan deck level (3/8" x 1 1/2" bolt for guards mounted on top of cowl extensions).

DANGER: Fan guard must be securely in place before the unit is placed in operation. Never step or walk on fan guard. Failure to follow these instructions may result in serious injury or death.



NOTE: For X and Y dimension locations, refer to **Figure 2**.

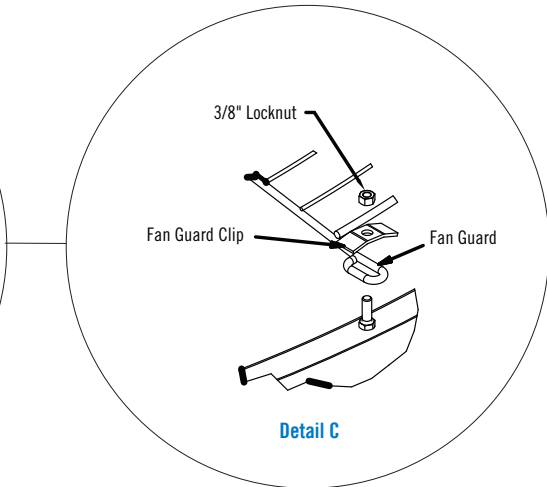
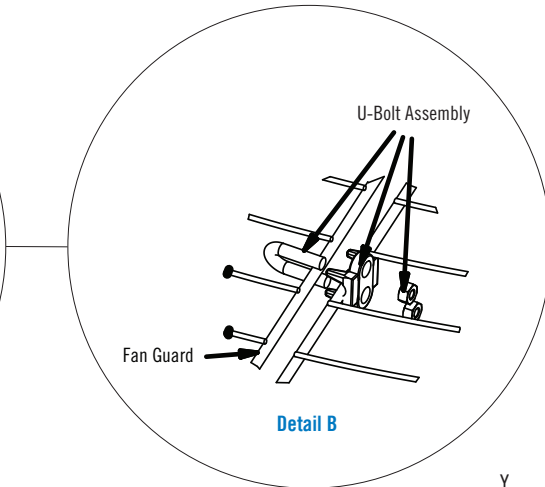
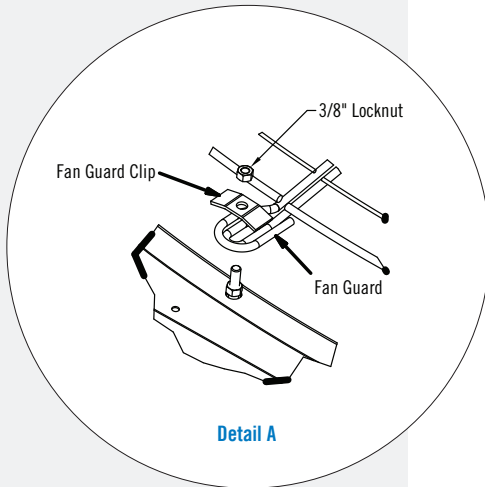


Two-Piece Fan Guard

1. Using six U-bolt assemblies, fasten the two halves of the fan guard together as illustrated in **Figure 2, Detail B**. Locate the U-bolt assemblies along the seam between the two guard halves per the X and Y dimension provided in **Table 2**, which are based on the diameter of the supplied fan.
2. Gradually tighten both nuts of the U-bolt assembly, alternating from one to the other, until 20-25 ft-lb of torque is achieved.
3. Mount the fan guard to the unit as illustrated in **Figure 2, Detail A** for the ends of the seam where the two guard halves join together, and **Detail C** for all other locations around the fan guard perimeter.

Fan Diameter	X	Y
9'	10"	17"
10'	10"	20"
11'	10"	23"

Table 2. U-Bolt Location Dimensions for Two-Piece Fan Guard Fastening



NOTE: For guards mounted at fan deck level, fasten the guard perimeter to existing 3/8" threaded studs protruding up from fan deck. For guards mounted to the top of fan cowl extension(s), fasten the guard perimeter using 3/8" x 1-1/2" long bolts supplied with fan guard hardware.

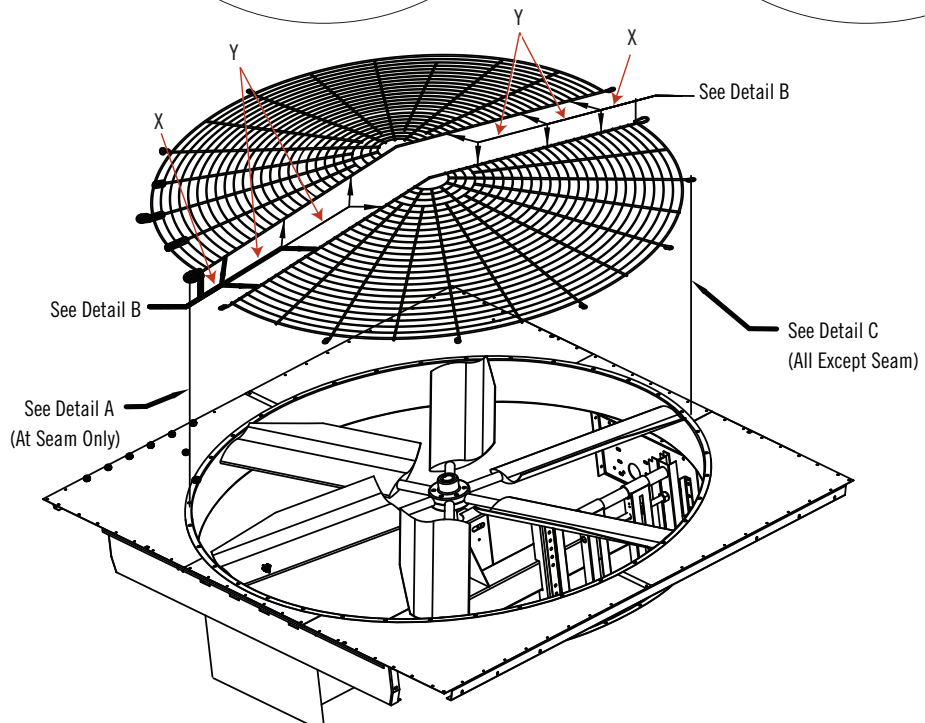


Figure 2. Two-Piece Fan Guard Assembly



Fan Guard

3000, 5000, FXV3, CXVT

Two-Piece Fan Guard

Four-Piece Fan Guard

Four-Piece Fan Guard

1. Assemble fan guard supports as illustrated in **Figure 3, Detail A**.
2. Secure fan guard pieces to fan guard supports as shown in **Figure 3, Detail B**.
3. Mount fan guard assembly to unit as shown in **Figure 3, Detail C**.

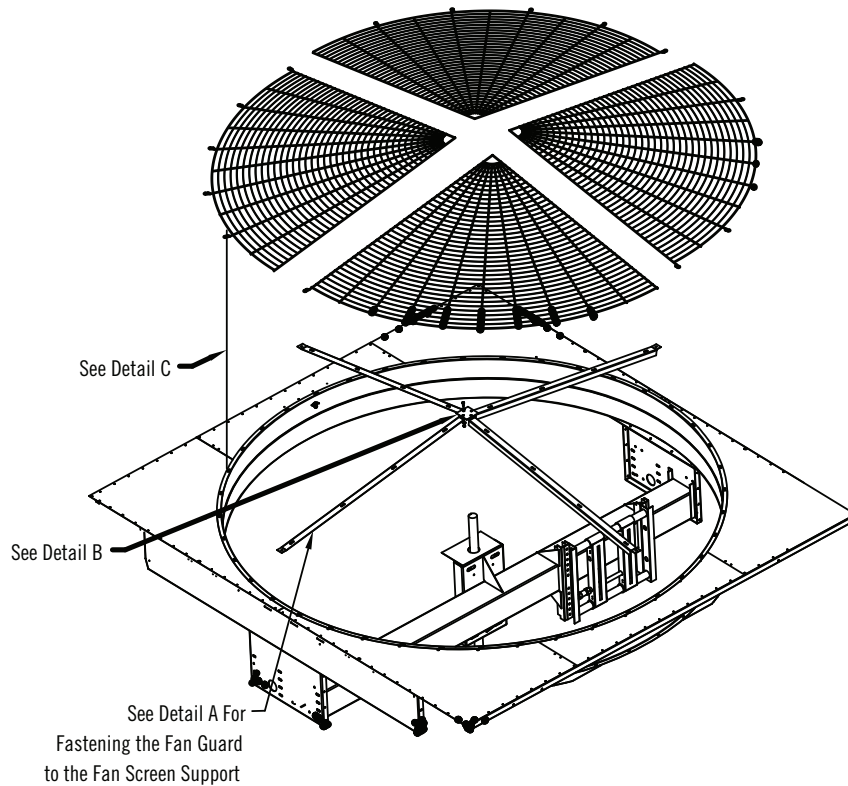


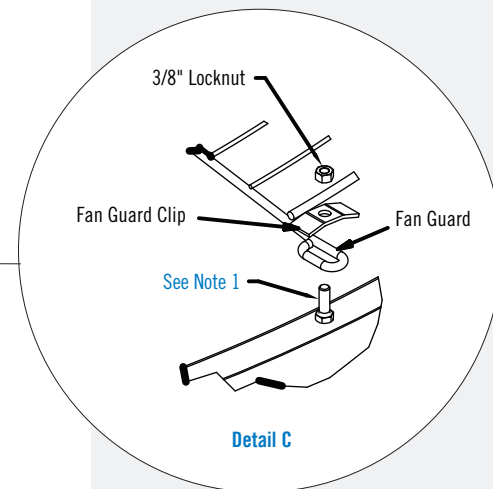
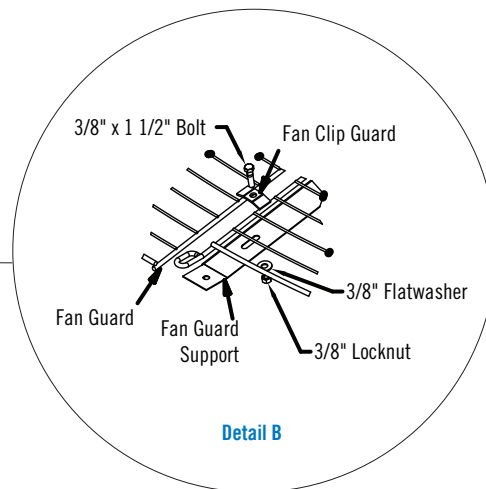
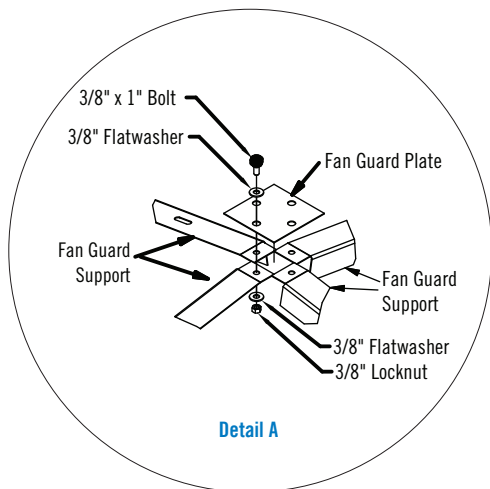
Figure 3. Four-Piece Fan Guard Assembly



DANGER: Fan guard must be securely in place before the unit is placed in operation. Never step or walk on the fan guard. Failure to follow these instructions may result in serious injury or death.



NOTE:
1. Existing 3/8" stud and nut for guard mounting at fan deck level (3/8" x 1 1/2" bolt for guards mounted on top of cowl extensions).



Units Before 2010: Fan Guard Installation for the Series 3000 Cooling Tower, FXV Dual Air Intake Closed Circuit Cooling Tower and CXV-T Evaporative Condenser

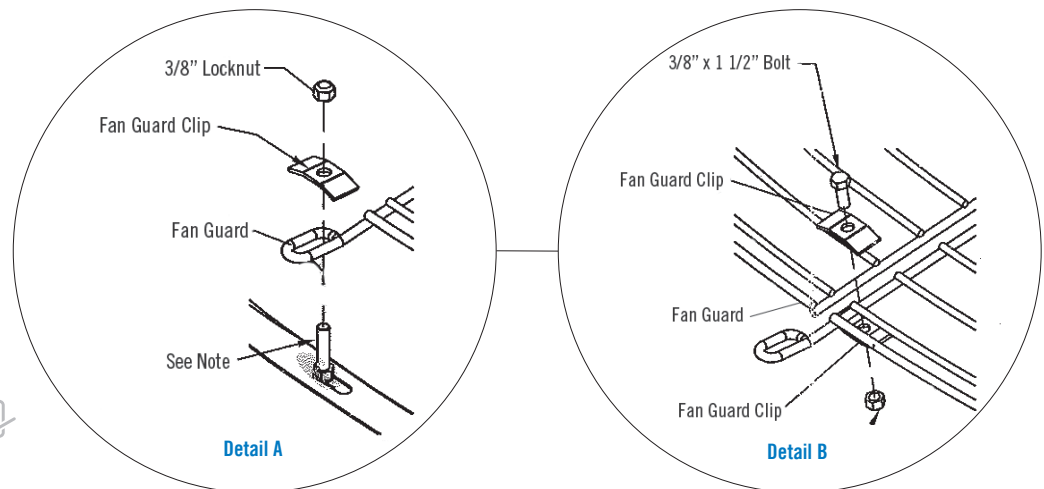
For one-piece fan guards, refer to **page 1**. For four-piece fan guards refer to **page 3**.

Fan Diameter	X	Y
9'	10"	17"
10'	10"	20"
11'	10"	23"

Table 3. U-Bolt Location Dimensions for Two-Piece Fan Guard Fastening

Two-Piece Fan Guard

1. Using six sets of fan guard clips and hardware, fasten the two halves of the fan guard together as illustrated in **Figure 4, Detail B**. Locate the clip assemblies along the seam between the two guard halves per the X and Y dimension provided in **Table 3**, which are based on the diameter of the supplied fan.
2. Tighten the hardware until the clip assembly is securely fastening the two halves of the guard together.
3. Mount the fan guard to the unit as illustrated in **Figure 4, Detail A**.



NOTE: Existing 3/8" stud and nut for guard mounting at fan deck level (3/8" x 1 1/2" bolt for guards mounted on top of cowl extensions).

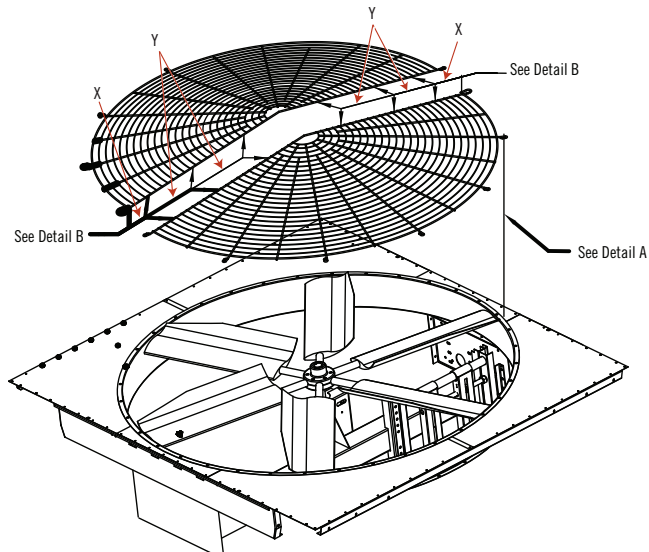


Figure 4. Two-Piece Fan Guard Assembly

Fan Guard Installation for the Series 1500 and PT2 Cooling Towers; FXV and PFi Closed Circuit Cooling Towers; CXV, CXVB, PCC, and PC2 Evaporative Condensers

Depending on the height of your unit, the fan guard may ship unmounted due to shipping height limitations on specific truck shipments.

One-Piece Fan Guard

Mount the fan guard to the unit as illustrated in **Figure 5, Detail A** at each mounting location around the fan guard perimeter.

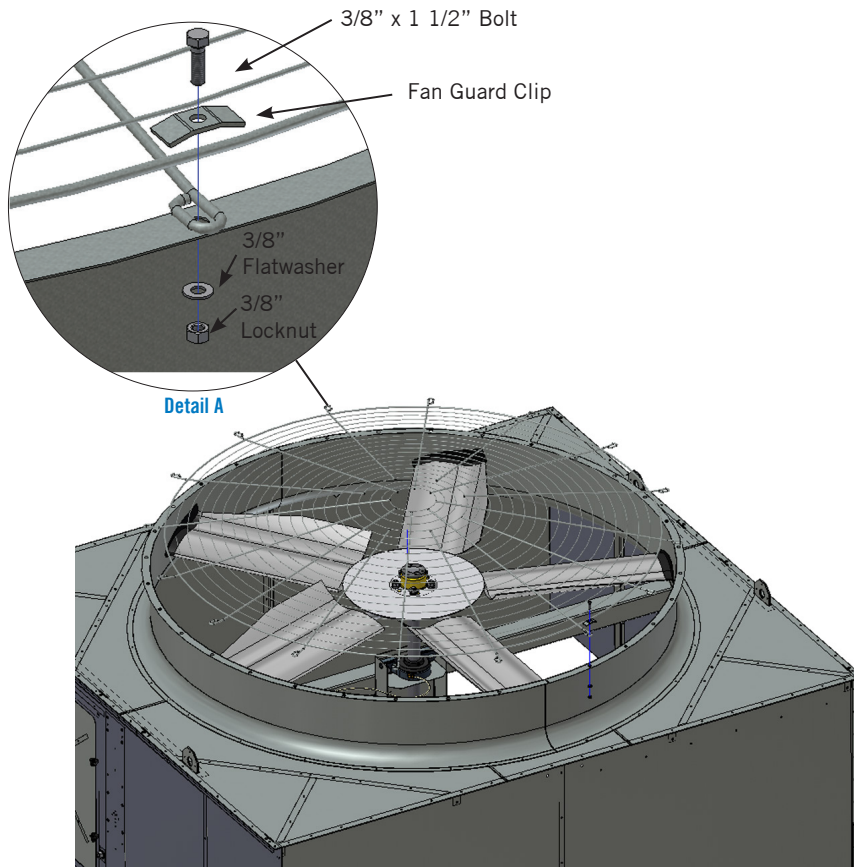


Figure 5. One-Piece Fan Guard Assembly



Fan Guard

3000, 5000, FXV3, CXVT

Two-Piece Fan Guard

1500, PT2, FXV, PFi, CXV, CXVB, PCC, PC2

One-Piece Fan Guard



DANGER: Fan guard must be securely in place before the unit is placed in operation. Never step or walk on the fan guard. Failure to follow these instructions may result in serious injury or death.

DANGER: Fan guard must be securely in place before the unit is placed in operation. Never step or walk on the fan guard. Failure to follow these instructions may result in serious injury or death.



Two-Piece Fan Guard (Not Applicable for the 1500, FXV, CXV)

1. Using six U-bolt assemblies, fasten the two halves of the fan guard together as illustrated in **Figure 6, Detail B**. Locate the U-bolt assemblies along the seam between the two guard halves per the X and Y dimension provided in **Table 4**, which are based on the diameter of the supplied fan.
2. Gradually tighten both nuts of the U-bolt assembly, alternating from one to the other, until 20-25 ft-lb of torque is achieved.
3. Mount the fan guard to the unit as illustrated in **Figure 6, Detail A** for the ends of the seam where the two guard halves join together, and **Detail C** for all other locations around the fan guard perimeter.

Fan Diameter	X	Y
9'	10"	17"
10'	10"	20"
11'	10"	23"

Table 4 U-Bolt Spacing Dimensions For Two-Piece Fan Guard Fastening

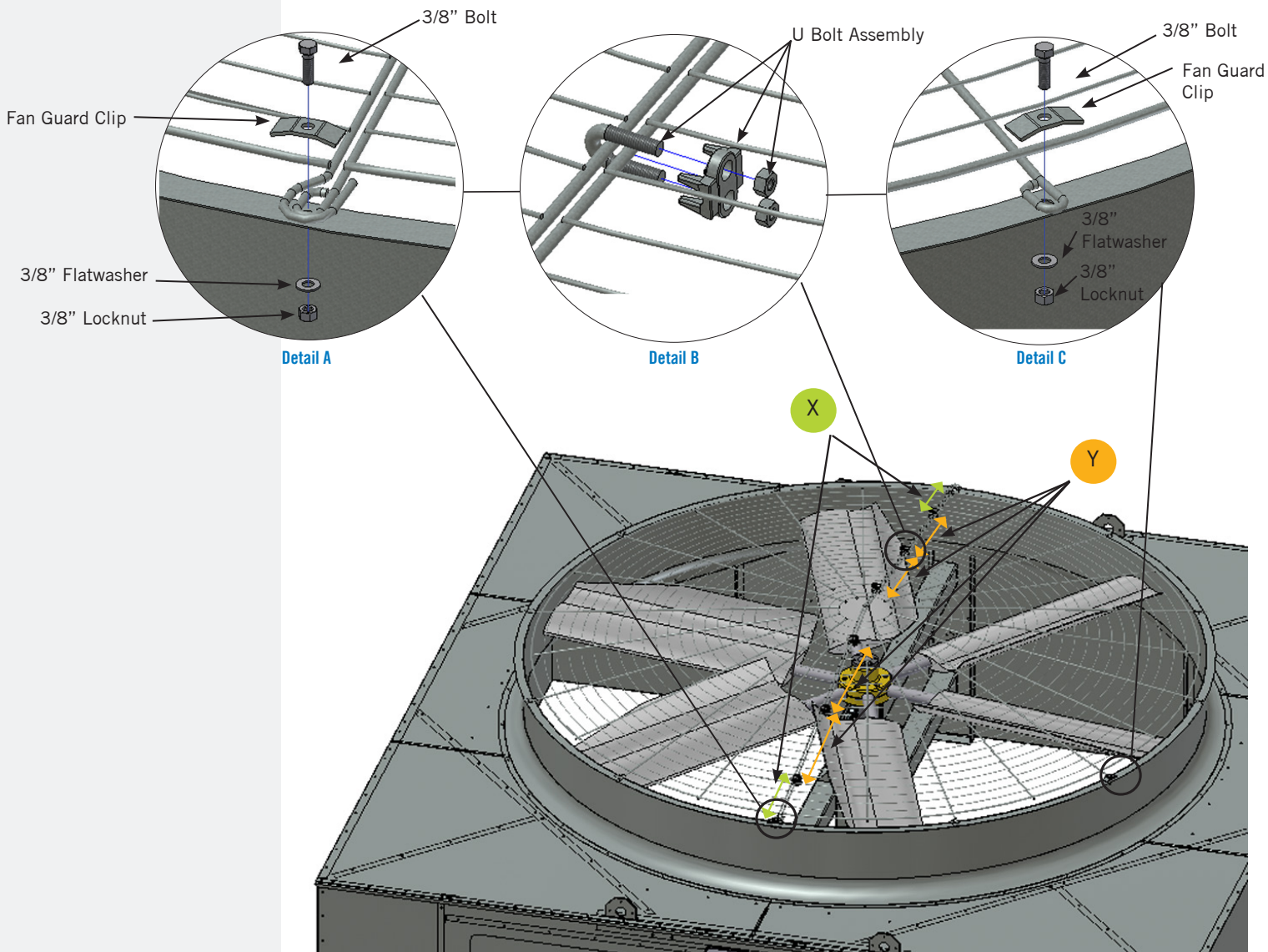


Figure 6. Two-Piece Fan Guard Assembly

Parts available for purchase
at www.CoolingTowerWorld.com



Recommended Spare Parts

BAC's Factory Authorized Parts are manufactured to meet rigorous cooling tower duty specifications and are guaranteed to fit your unit and perform as original equipment.

BAC is proud to introduce Cooling Tower World, the only place to purchase BAC Factory Authorized Parts online. All Cooling Tower Parts are shipped second day and carry a full 1-year warranty backed by BAC. To purchase parts online, visit www.CoolingTowerWorld.com today.

BAC Factory Authorized Parts can also be ordered through your local BAC Representative. In addition, most BAC Representatives maintain a local inventory of commonly used parts. For a free unit inspection, call your local BAC Representative today.

Even with this fast delivery capability, it is still recommended that certain essential, emergency repair parts be maintained in your local inventory to minimize any potential downtime.

Spare Parts Available on Cooling Tower World

- Pre-cooler Pad Kit
- Pump Replacement Kit
- Spray Piping Kit
- Float Switch
- Make-Up Valve
- Dump Valve
- Strainer Replacement
- Spare Fans
- Spare Coils
- and more!

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