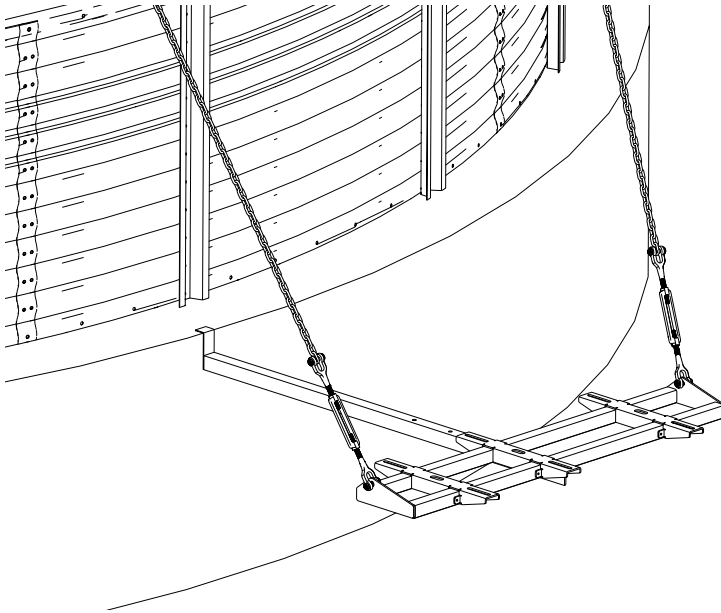


AGI **GRAIN GUARD**

Hanging Centrifugal Fan Support Installation Instructions

Applicable models:

GGA-80141, GGA-80142



Intended Use

The fan support is intended for use as listed below and described throughout this manual. Use in any other way is considered contrary to the intended use and is not covered by the warranty.

Intended use for the fan support:

- low speed fans of the following models:
GGL-805XX, GGL-807XX, GGL-810XX, GGL-814XX, GGL-815XX, GGL-820XX, GGL-825XX, GGL-830XX, GGL-840XX, GGL-850XX, GGF-820XX, GGF-825XX, GGF-830XX, GGF-840XX;
- GGA-80141 for 4" and 2.66" corrugated stiffened bin only.
- GGA-80142 for unstiffened bin only.

NOTICE

Installing the stiffened bin bracket on the unstiffened bin could result in bin wall damage.

Installation Safety

WARNING

- Do not take chances with safety. The components can be large, heavy, and hard to handle. Always use the proper tools, rated lifting equipment, and lifting points for the job.
- Always have two or more people installing the fan support.
- Tighten all fasteners according to their specifications. Do not replace or substitute bolts, nuts, or other hardware that is of lesser quality than the hardware supplied by the manufacturer.
- Do not suspend additional equipment/components from this kit that are not specified in the manual.

Handling the Fan

NOTICE

- Lift the fan by the base, mounting supports, or lifting locations.
- Never lift a fan by the wheel, motor, motor bracket, housing inlet, outlet, or any fan part not designed for lifting.
- Always use a spreader bar to avoid damage.

Before You Begin

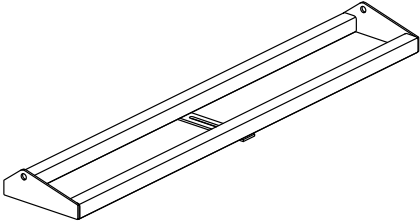
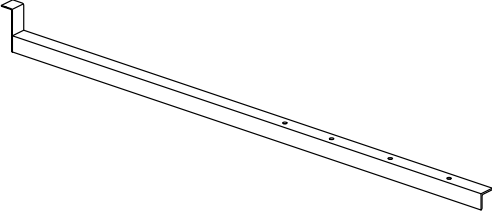
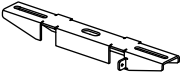

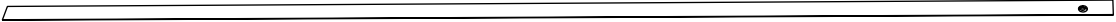
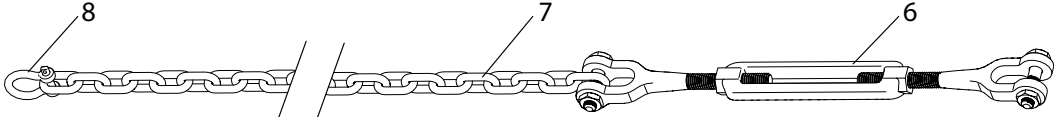
- Read the fan installation manual for proper fan handling instructions.
- Confirm that the transition will fit to the fan and grain bin inlet.
- Familiarize yourself with the components. Refer to [Section – Fan Support Parts on page 3](#) for fan support parts identification.

Required Tools/Hardware

- Angle grinder with cutting disk
- Temporary support items for fan support and transition
- 1/2" Masonary drill bit
- 9/16" wrench or socket
- 3/8" concrete anchor kit
- Measuring tape and level

Fan Support Parts

Table 1. Fan Support and Cable Kit Parts ¹

Fan Support Parts	
(1) 	(2) 
(3) 	(4) GGA-80141 only 
(5) GGA-80142 only 	
Cable Kit Parts	
	

1. Fan support hardware not shown

Table 2. Parts List

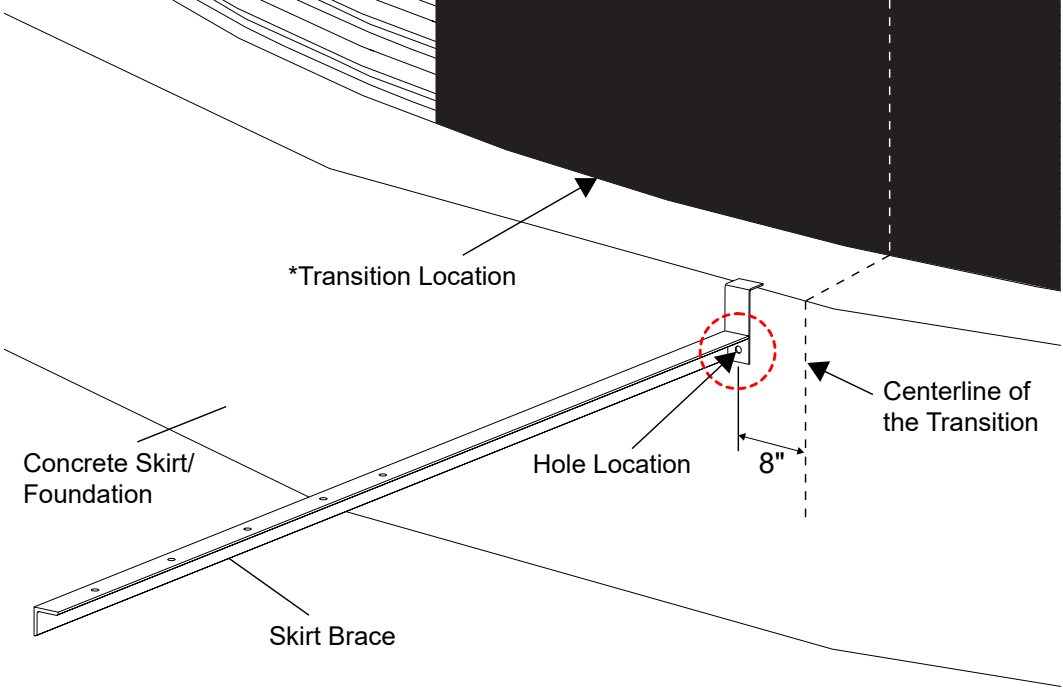
Item	Part No.	Description	Qty
Fan Support Parts			
1	LXA-5097	FRAME WELDMENT	1
2	LXA-5096	SKIRT BRACE	1
3	LXA-2418	FAN MOUNT	3
4	LZA-2419	STIFFENED BIN BRACKET (for GGA-80141 only)	2
5	LXA-2542	UNSTIFFENED BIN WALL BRACE (for GGA-80142 only)	2
Cable Kit Parts			
6	537-3790	TURNBUCKLE 1/2" X 6"	2
7	534-3794	30' CHAIN 5/16" WELDED GR30 ZN	2
8	537-3795	SHACKLE 5/16" GALV 3/8" PIN	2
Fan Support Hardware			
9	306-1216	TEK SCREW, HWH #12 X 1" ZN	4
10	307-2620	CAPSCREW, HEX FLG SER 5/16" X 3/4" NC	6
11	310-3022	NUT, HEX FLG 5/16"-18 SER NC GR5 ZN	6
12	313-2299	BOLT, BIN 3/8" X 3/4" GR8.2	1
13	309-2959	NUT, HEX FLG 3/8"-16 SER NC GR5 ZN	1

Installing the Fan Support

Important

The fan support in this instruction requires the transition to be at least 1/2" above the concrete skirt.

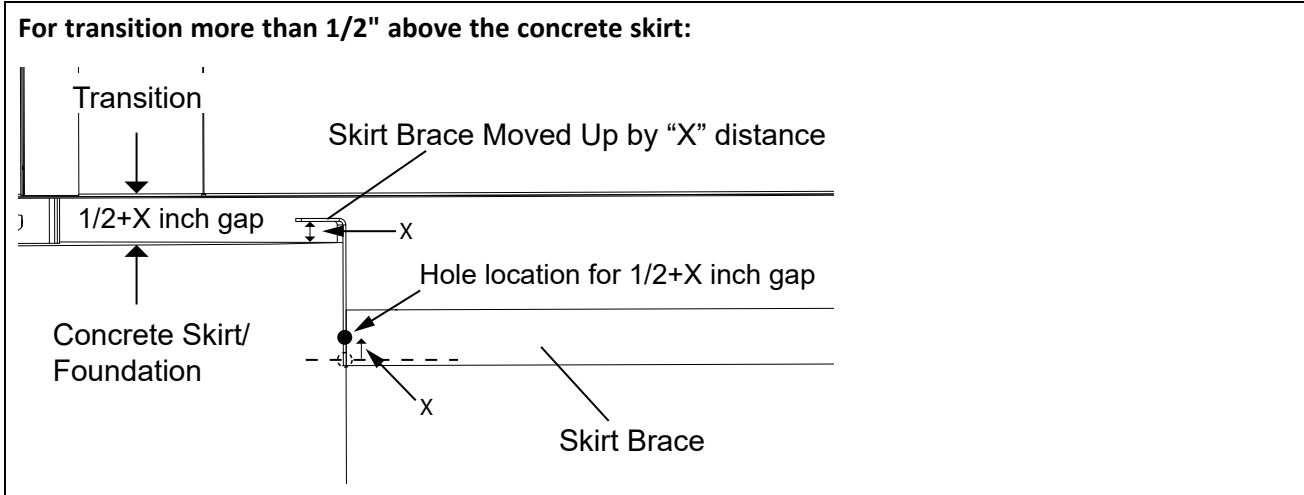
1. Mark a line on the concrete skirt 8" to the left from the center of the transition. Center the skirt brace on the line, and mark the hole location to drill.



(*Transition not shown in the figure)

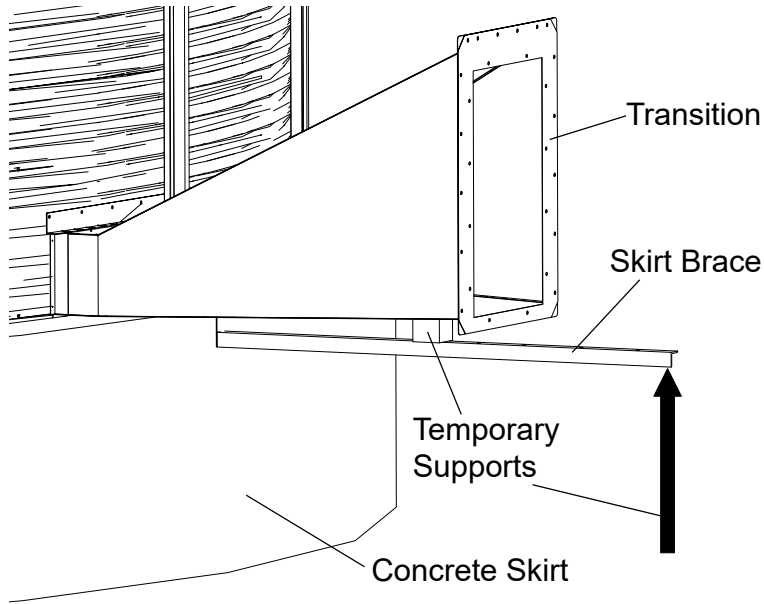
Important

If the transition is more than 1/2" above the concrete skirt, measure the extra gap from 1/2", move the skirt brace up by that difference, and mark the hole location.



2. Drill a 1/2" hole to the marked location for a 3/8" concrete anchor (not supplied).

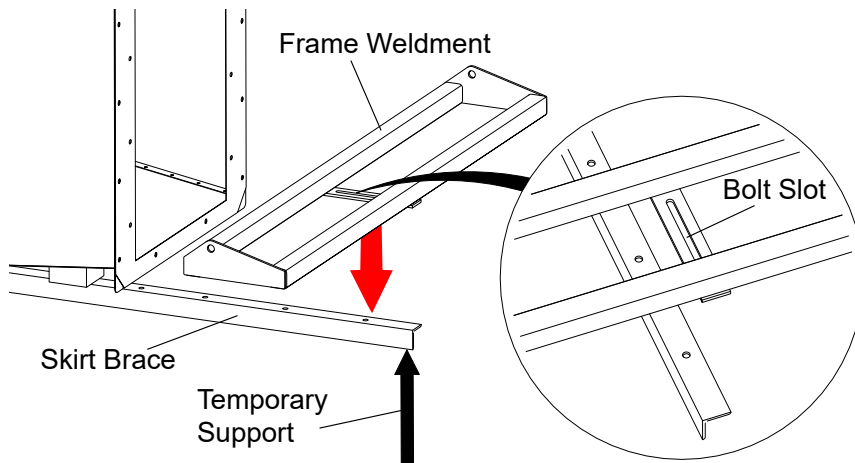
3. Bolt the skirt brace to the concrete skirt, and block up the other end to support it. Support the transition on the skirt brace with blocking.



4. Install the frame weldment to the skirt brace using the 3/8" bolt.

Note

Do not tighten the bolt until fan is installed.



- Lift the fan up, and attach the three mount brackets to the bottom of the fan using the 5/16" bolts.

Important

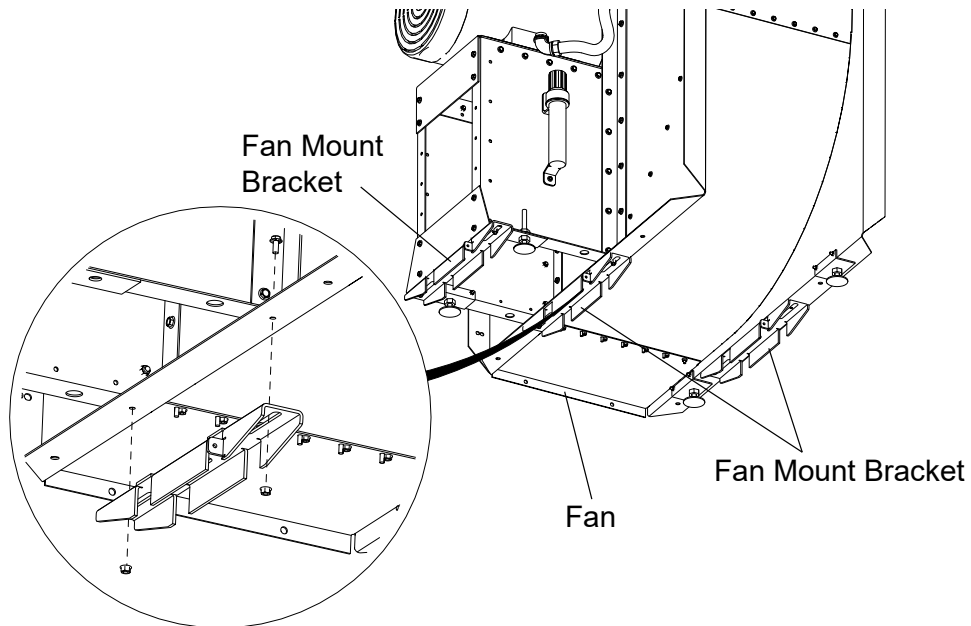
Lift the fan by the base, mounting supports, or lifting locations. Never lift a fan by any other fan part not designed for lifting.



WARNING Fan must be supported by proper equipment at all time until the chains are installed, and the installation is fully complete.

Note

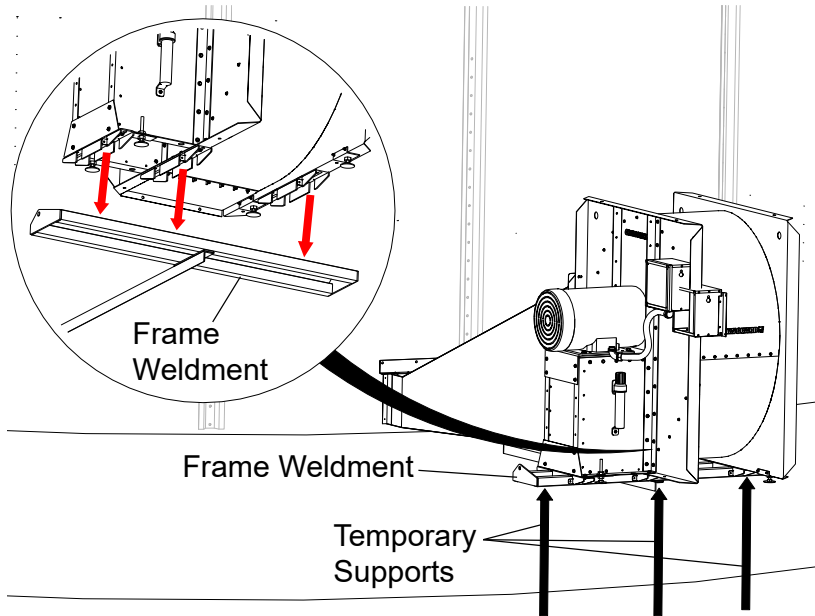
Do not fully tighten the bolts until fan is bolted to the transition.



6. Place the fan on the frame weldment.

Note

The brackets must slide over top of the frame weldment. Align the fan with the transition by moving the fan left or right as required.

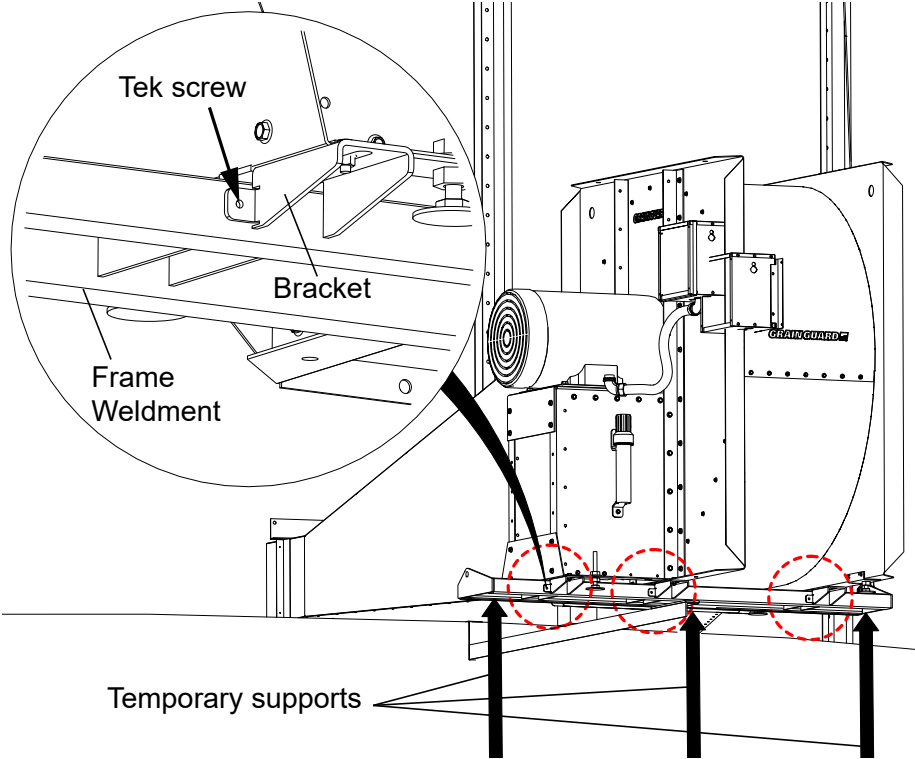


7. Tighten the 3/8" bolt in the frame weldment slotted hole.
8. Bolt the fan to the transition.

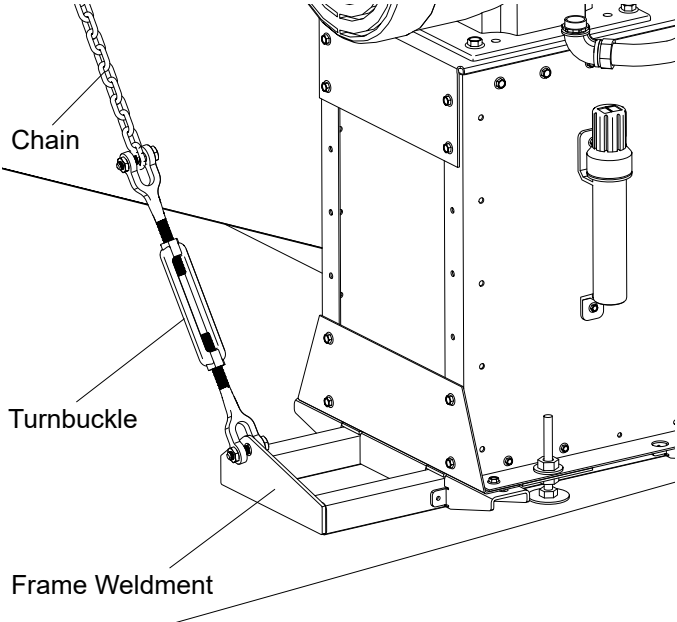
Note

Do not fully tighten the bolts between transition to fan housing until the fan support installation is complete and the fan is properly levelled.

9. Using Tek screws, fasten and tighten the mount brackets to the frame weldment.



10. Attach a chain and turnbuckle pair to each side of the frame weldment.



11. GGA-80141 (for stiffened bin) and GGA-80142 (for unstiffened bin) include bin brackets of different designs (see [Section – Fan Support Parts on page 3](#)). Follow the instructions below accordingly:

NOTICE

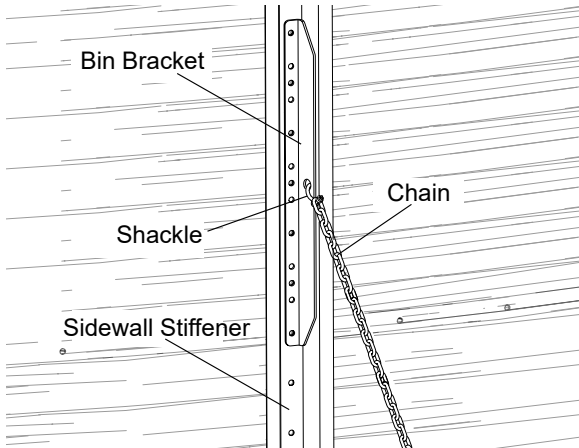
Do not install the stiffened bin bracket to the unstiffened bin.

Installing the stiffened bin bracket to the unstiffened bin could result in bin wall damage.

- a. **GGA-80141 (for stiffened bin):** Attach the chains to the bin brackets with shackles, and install the bin brackets with the chain at a proper height (depending on the fan) to the stiffener. Use the existing bin hardware to attach the bracket to the bin.

Note

Position the bracket so that all of the stiffener bolts are aligned with holes in the Bin Bracket. Some Bin Bracket bolt holes will not be used.



<p>For 20 to 50 hp fans, X = 120"; For less than 20 hp fans, X = 90"</p>	
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Note

If necessary, resize the chain to the proper link length that allows slack in the chain. The slack can be removed later when adjusting the fan level.

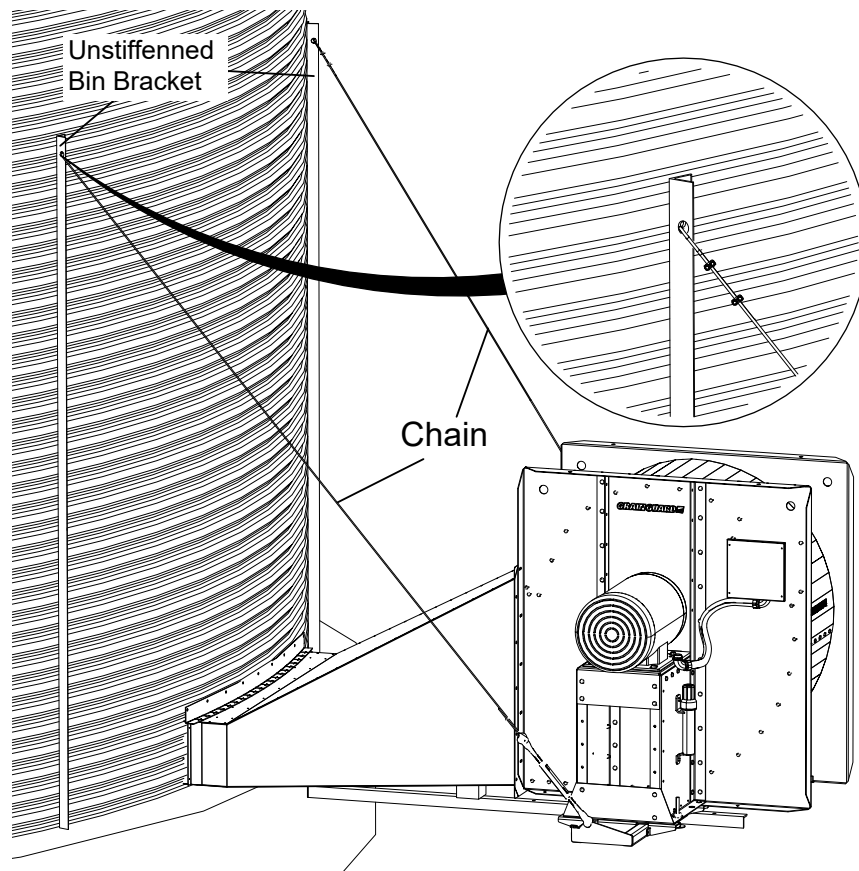
Important

Do not install the brackets more than one wall sheet width apart from each other.

- b. **GGA-80142 (for unstiffened bin):** Install the bin brackets beside the vertical seam (one horizontal hole left or right from the vertical wall seam) of the bin wall. Attach the chains with shackles to the bin brackets.

Important

Space the bin brackets one full wall sheet apart between each other. Drill a hole in the wall sheet for the top holes of the bin brackets. Position the brackets so that the horizontal bin wall bolts are aligned with the holes of the bin brackets. Some bin bracket bolt holes will not be used.



12. Tighten the bolts between the transition and fan housing.
13. Make sure the fan is sitting level and aligned properly on the fan support. Turn the turnbuckle to remove slack. Use a level, and adjust the turnbuckles as needed to level the fan.

NOTICE

Using a non-levelled fan may produce grinding, or rubbing of the fan wheel against the inlet cone, and may lead to equipment damage.

Turn off the fan immediately if you hear any interfering noise when the fan is in operation.

Note

If necessary, secondary supports can be added to the fan support for extra stability. Refer to [Section – Secondary Support \(Optional\) on page 11](#).

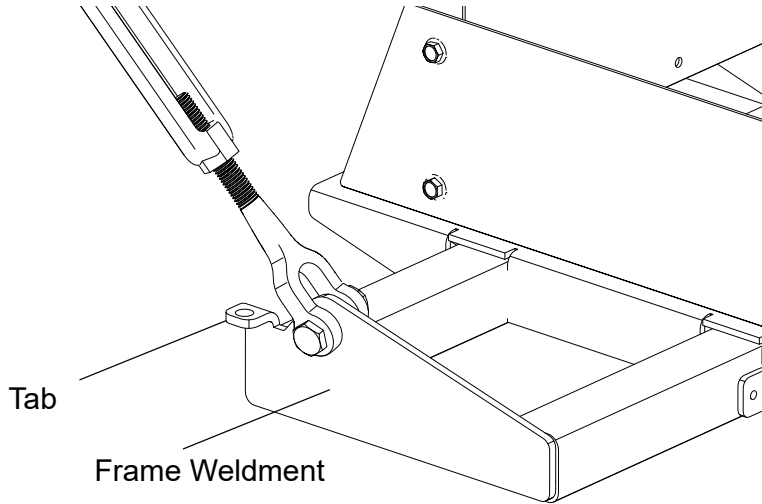
Note

If the skirt brace extends past the fan body, excess portion may be cut off.

Secondary Support (Optional)

If there is significant horizontal sway in the fan frame after all bolts are tightened, a secondary support can be used to secure frame.

- Use a piece of angle iron attached to the frame tab (both sides of the frame weldment) and anchored to the foundation.



Note

Fan support kits do not include angle iron or other additional extra support items.

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