

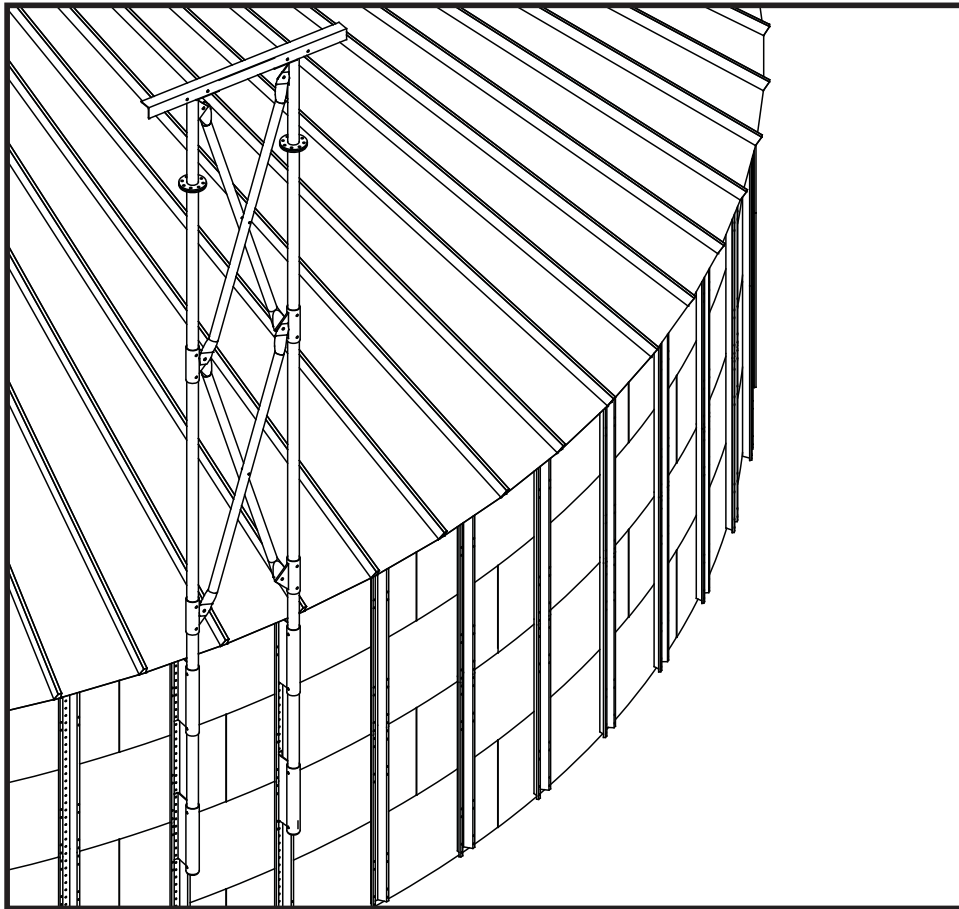


A Unit of **GLOBAL** Industries, Inc.

SIDEWALL BRACKET SUPPORT

SUPPORT HEIGHTS 21' - 30' [6.4 m - 9.1 m]

Construction, Owner's, and Operator's Manual



Effective Date
2011-11-01



Publication Number
400034 Rev 01
(English Version)

The Symbol shown below is used to call your attention to instructions concerning your personal safety. Watch this symbol - it points out important safety precautions. It means “ATTENTION” - Become Alert! Your Personal Safety Is Involved! Read the message that follows and be alert to the possibility of personal injury or death.



Be Alert! Your Personal Safety Is Involved

A copy of this manual should be available at all times to the owner/operator. Additional copies may be requested from the company at the address shown on the back cover. Please reference manual part number 4000034 when requesting additional copies.

Please Contact BROWNIE SYSTEMS or Your Dealer
If You Have Any Questions Concerning This Manual

Keep This Manual In A Safe Place Available For Future Reference.



PREFACE

You have purchased the finest Sidewall Bracket Support manufactured today. The following information is intended as a guide for: Sidewall Bracket Support pre-assembly, proper construction of your Sidewall Bracket Support, and safe and proper use of your Sidewall Bracket Support once constructed.



General Safety Statement

Your safety and the safety of others associated with grain system equipment, is of prime concern to us at Brownie Systems. This manual was written with the safety of the operator and/or others who come into contact with the equipment as our prime concern. We wrote this manual to help you to better understand how to safely build and use your Sidewall Bracket Support.

It is your responsibility as the owner, builder, operator, or supervisor, to know what specific requirements, precautions, and hazards exist and to make these known to all personnel working with the equipment or in the area, so that they too may take any necessary safety precautions that may be required!


Failure to read this Manual and its Safety Instructions by all operators and all personnel is a misuse of the equipment. We want you as our partner in safety!

All personnel, including construction personnel, must read and understand all equipment Operator's Manuals before starting Sidewall Bracket Support construction!



NOTE: Although Global Industries, Inc. language translations of this manual are made as accurately as possible, if there is a conflict or difference between the English and the other translations of this manual, the English text will prevail.

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Warranty

Global Industries Inc. (the **Company**) makes the following warranty to the initial retail purchaser of its products (the **Customer**).

MATERIALS and WORKMANSHIP:

The Company warrants products manufactured by it to be free from defects in materials and workmanship in normal use and service for a period of one (1) year after date of delivery to the Customer.

COMPANY'S OBLIGATION and CUSTOMER'S EXCLUSIVE REMEDY:

The Company's sole obligation and the Customer's exclusive remedy under this warranty is as follows:

If within one (1) year after delivery to the customer the product fails to function properly due to a defect in either materials or workmanship, the Company will at its option, either repair the defective part or replace the defective part with a new or reconditioned part. Labor charges for removing defective parts and installing replacement parts, shipping charges with respect to such parts, and applicable sales and other taxes, if any, shall not be covered by this warranty.

CONDITIONS, LIMITATIONS, AND EXCLUSIONS:

There are no warranties or merchantability or fitness for a particular purpose with respect to any product manufactured or sold by the Company. Motors provided by the Company are in most instances warranted by the manufacturer thereof and are not warranted by the Company. The Company shall not be responsible under this warranty or otherwise for personal injury or for **Incidental or Consequential Damages**, including, without limitation, loss of use and lost profits. This warranty does not apply to defects or damages caused by misuse, improper maintenance, or improper installation of the Company's product or any equipment attached to or used in connection with the Company's product. The Company reserves the right to make changes or improvements to its products without incurring any obligation with respect to previously manufactured products. Field modification of this product without the expressed written permission of the Company constitutes a misuse of the product. The Company shall have no liability under this warranty until payment in full for the product in question has been made by the customer. The foregoing is the sole warranty made by the Company. No one is authorized to make other warranties on behalf of the Company.

<1> Safety



General Safety Requirements



WARNING!

ALL INFORMATION ON THIS PAGE IS WARNING INFORMATION!

This Brownie Systems Construction/Safety manual is written to assist and instruct those who are responsible for the complete Sidewall Bracket Support assembly, and for anyone using it after it is completed.

Global Industries Inc. assumes no liability with respect to proper construction and inspection, or use of its products established under applicable laws, all of which is the sole responsibility of the purchaser and those doing the assembly work.

Appurtenances and the accessories manufactured by us for use with our products conform only to applicable Federal or Safety Standards in effect at such time.

SAFETY COMPLIANCE

It is your responsibility as an owner or operator or supervisor, to know what specific requirements, precautions, and work hazards exist and to make these known to all other personnel working with the equipment or in the area, so that they too may take any necessary safety precautions that may be required.



WARNING!

Watch For This Symbol:  !

It Points Out Important Safety Precautions.

It Means “ATTENTION” - Become Alert!
Your Safety Is Involved.

WORK AREA SAFETY STATEMENT

Under no circumstances should persons not involved in the operation be allowed to **trespass** into or be present in the work area.

It shall be the duty of all operators to see that children and/or other persons stay out of the work area! Trespass into the work area by anyone not involved in the actual operations, or trespass into a hazard area by anyone, shall result in an immediate shut down by the operator.

It shall be the responsibility of all operators to see that the work area has secure footing and is clean and free of all debris and tools which might cause accidental tripping and/or falling. It shall also be their responsibility to keep the work area clean and orderly during the operation. It shall also be the responsibility of the operator to have damaged equipment repaired and to be made free of sharp edges.

PROPER PERSONNEL

To insure safe use of your Sidewall Bracket Support be certain that only trained persons install, maintain, and use it.

**WARNING!**

**ALL INFORMATION ON THIS PAGE IS
WARNING INFORMATION!**

OSHA OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

Certain purchasers of our products may be subject to the requirements and standards of the William-Steiger Occupational Safety and Health Act of 1970, which prescribes standards for use of appurtenances of our manufacture, such as handrails, platforms, stairways, fixed ladders, ladder cages, and guard rails. (Occupational Safety and Health Standards Section 1910.21 through 1910.32). Before installing these devices, familiarize yourself with the above Federal Standards.

At the time of manufacture, these optional items conform to applicable standards

Global Industries, Inc. assumes no liability with respect to proper construction, assembly, inspection, or use of its products under applicable laws, all of which is the sole responsibility of the purchaser and those doing the assembly work.

OSHA, ANSI, NIOSH

You may obtain further relevant safety information for the safe operation, construction, and use of your Sidewall Bracket Support and other grain systems from OSHA, ANSI, and NIOSH:

www.osha.gov

1-800-321-OSHA

www.ansi.org

www.cdc.gov/niosh

1-800-232-4636 (cdc info, NIOSH)

AUXILIARY EQUIPMENT SAFETY

You may decide to buy and install “auxiliary equipment” made by other manufacturers. Global Industries, Inc. has no control over the design and manufacture of this equipment. If you buy and install auxiliary equipment then at a minimum **we suggest that you do the following:**

- 1** Obtain, read, and understand the instructions and cautions of the auxiliary equipment manufacturer. Be certain all equipment is installed according to the manufacturer’s instructions.
- 2** Check with Global Industries, Inc. or your dealer to make certain that your Sidewall Bracket Support is designed to support any additional loads supplied by the auxiliary equipment.
- 3** Obtain any applicable safety decals from the manufacturer of the auxiliary equipment and display each safety decal in a visible location.
- 4** Make certain all electrical equipment is properly installed and grounded by a qualified electrician.
- 5** Check availability and operation of electrical lock-out and emergency stop systems.
- 6** Be certain all guards and shields are securely in place.
- 7** Store all operations/maintenance manuals in a safe place available for future use.

**WARNING!**

ALL INFORMATION ON THIS PAGE IS
WARNING INFORMATION!

OPERATOR QUALIFICATIONS

Operation of this unit shall be limited to competent and experienced persons. In order to be qualified, they must also know and meet all other requirements, such as, but not limited to, the following:

- 1** Some laws and regulations specify that no one under the age of 16 may operate power machinery. It is your responsibility to know what these requirements are in your own area or situation.
- 2** Current OSHA regulations state in part: "At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved.**"
- 3** Unqualified persons are to STAY OUT of the work area.
- 4** A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.

* Federal Occupational Safety and Health Standards for Agriculture, Subpart D. Section 9128.57 (a) (6)

SAFETY QUESTIONS OR CONCERNS

Please contact Brownie Systems with any specific Sidewall Bracket Support or grain systems equipment use safety needs!

In the USA -

Phone: 1-800-228-4285

Fax: 1-308-382-6954

WORK AREA AND EQUIPMENT SAFETY

Do not operate your equipment without shields and guards in place. Failure to heed this warning may result in serious personal injury or death!

Follow all climbing safety laws and regulations. When climbing Sidewall Bracket Supports or anytime when climbing at unsafe heights, take care not to fall. Common sense dictates that such appurtenances should not be used when conditions such as rain, wind, or ice preclude their safe use. Global Industries, Inc. strongly recommends that optional climbing equipment be purchased to meet the current specifications set forth by OSHA whether the individual operator is required by law to do so or not. A properly secured safety belt should be used at all times when performing operations work or maintenance on Sidewall Bracket Supports.

Care must be taken to avoid entanglement in equipment installed in or on Sidewall Bracket Supports. Securely lock-out all power, be it electrical or PTO prior to working on or near such equipment.

Field modification of the Sidewall Bracket Support without the authorization of the manufacturer may present unknown dangers to the operator and must be avoided.

**WARNING!**

Owners and Contractors: Before starting construction of your Sidewall Bracket Support, 1) **READ AND UNDERSTAND THIS MANUAL!** 2) Read and understand the instructions for all equipment, auxiliary equipment structures, other products, and the like within or connected to this Sidewall Bracket Support. 3) View all illustrations in this manual. 4) Read and understand any applicable OSHA Regulations, Building Codes, and Electric Codes.

**WARNING!**

Make certain all persons on Sidewall Bracket Supports, Stairways, Ladders, Platforms, and other Grain Systems Equipment during construction are properly fastened to safety cables to prevent injury or death due to falling!

**WARNING!**

Installation of Accessories or equipment in or on the Sidewall Bracket Support that would over stress the structure in any manner will void the Warranty. If you do not have specific recommendations from Brownie Systems, where additional loading is involved, please contact Brownie Systems before installing any such appurtenances or equipment.

**WARNING!**

Make certain that all persons within the work area on ladders, lifts, crane lifts, scaffolds, or the like are secure and not in danger of falling! Also make certain that the work surfaces are clean and free of clutter.

**WARNING!**

UNDER NO CIRCUMSTANCES SHALL ANY OTHER BOLT BE SUBSTITUTED FOR THOSE SUPPLIED BY BROWNIE SYSTEMS!

**WARNING!**

Any alterations to Sidewall Bracket Support and all other installations within the Sidewall Bracket Support system without the authorization of the Brownie Systems Engineering department is prohibited!

**WARNING!**

Local codes supersede the instructions provided in this manual and should be strictly adhered to. Contact the manufacturer if you have questions.

**WARNING!**

Avoid injury or death! Use extreme caution when working from heights. Use the proper equipment when working from heights. Take the proper precautions to prevent persons or objects from falling!

**WARNING!**

IMPORTANT: If any questions or difficulty should arise during the process of Sidewall Bracket Support installation, the contractor or owner should contact Brownie Systems to get an answer and to resolve the problem!

**WARNING!**

Do not: use any damaged Sidewall Bracket Support components or substitute parts for those supplied by Brownie Systems. It may not be safe.

**WARNING!**

Do not attempt Sidewall Bracket Support construction when the weather makes it unsafe. Especially, when wind conditions are not favorable!

**WARNING!**

Read and understand all of the instructions in this manual before starting assembly. Build your Sidewall Bracket Support in accordance with the instructions. Failure to build your Sidewall Bracket Support correctly could result in structural damage or failure! Structural damage or failure of any part of this unit could result in injury or death of persons. Call Brownie Systems using the phone number on the back of the manual if you have any questions regarding assembly.

**WARNING!**

Call the factory right away, to get an answer or to resolve the problem, if any of the following situations occur:

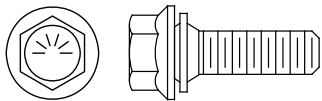
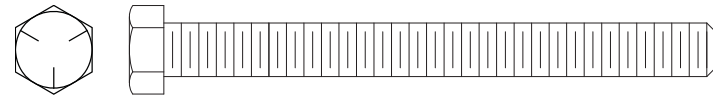
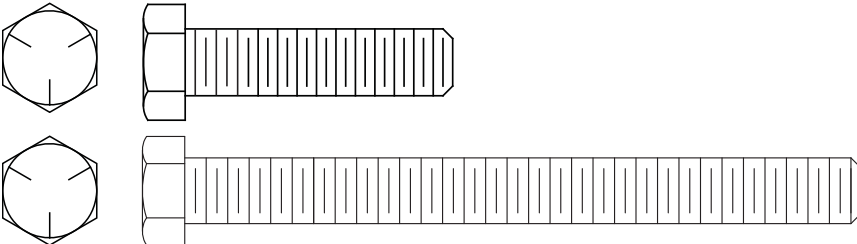
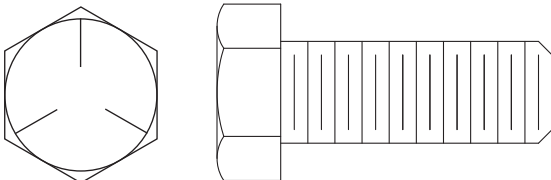
- 1) You encounter any questions or problems with Sidewall Bracket Support construction.
- 2) You have modified (or plan to modify) the catwalk or any equipment supported by the Catwalk in a significant way.
- 3) A modification is made that adds (or may add) wind loading to the Sidewall Bracket Support.

**WARNING!**

When adding additional equipment not previously accounted for, considerable wind load or weight may be added to the tower. Be certain that your Sidewall Bracket Support is designed for all equipment, and any future additions. If you are uncertain, contact the factory before installing the tower.

<2> Bolt Torque

BOLT TORQUE (Approximate Torque Values)

Bolt Description	Bolt Grade	Torque	Bolt Identification
3/8" x 1 1/4" bin bolt (comes with the grain bin stiffener assembly) (018981)	Grade 8.2	48 ft-lbs 65 Nm 6.6 kgf-m	
7/16" x 4 1/2" hex bolt (90000169)	Grade 5	55 ft-lbs 75 Nm 7.6 kgf-m	
5/8" hex bolt 5/8" x 2" (90000078) 5/8" x 5" (90000176)	Grade 5	170 ft-lbs 230 Nm 24 kgf-m	
3/4" x 2" hex bolt (90000177)	Grade 5	290 ft-lbs 390 Nm 40 kgf-m	

Use the torque values listed in the table above for all Sidewall Bracket Support hardware connections!

Contact the factory with any Tower or Tower component construction or assembly problems.

Phone: 1-800-228-4285

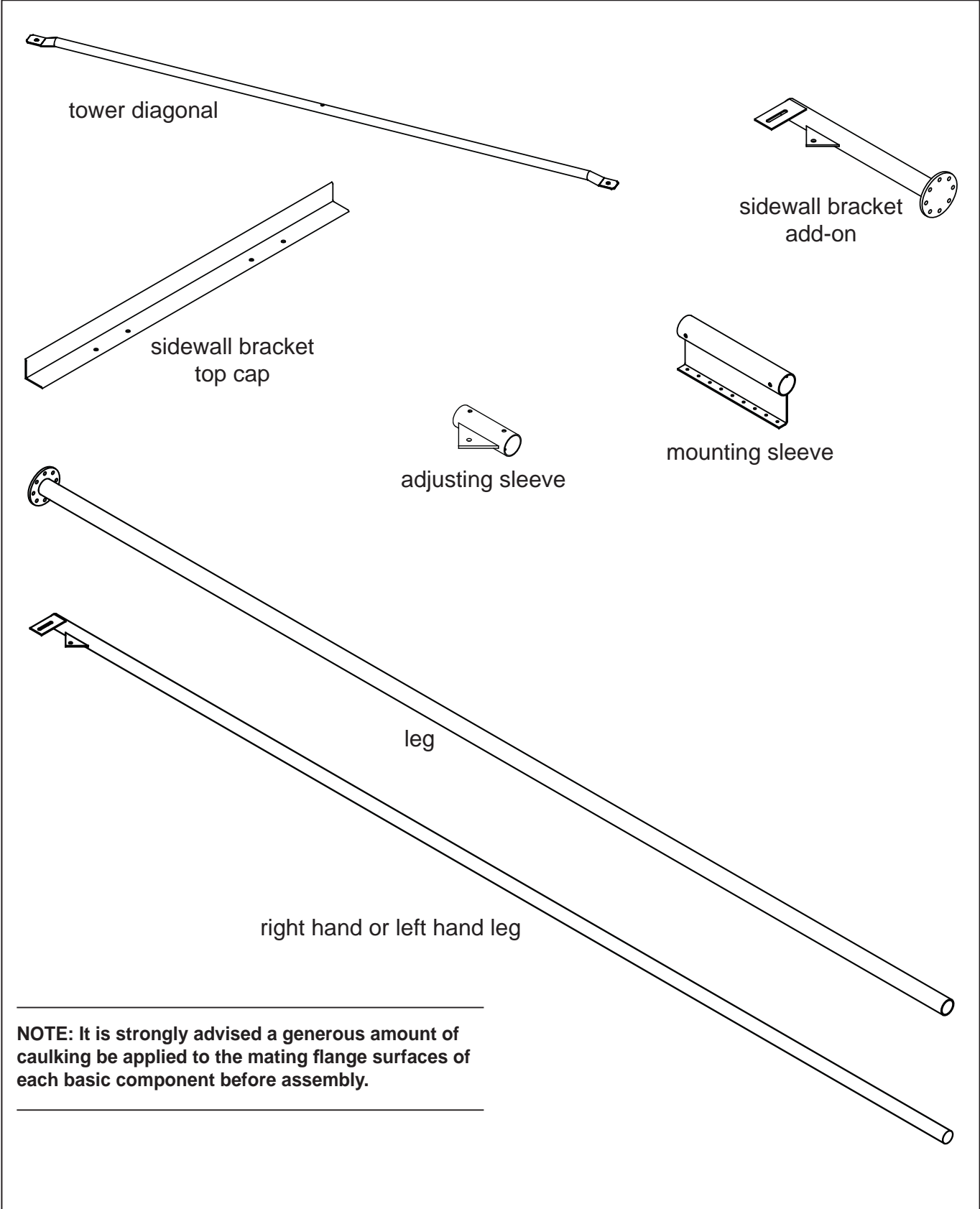
Fax: 1-308-382-6954



WARNING!

UNDER NO CIRCUMSTANCES SHALL ANY OTHER BOLT BE SUBSTITUTED FOR THOSE SUPPLIED BY BROWNIE SYSTEMS! The correct bolts as specified and provided by Brownie Systems must be used for the assembly of this Sidewall Bracket Support. You must achieve the correct bolt torques as indicated in the table above throughout the complete assembly!

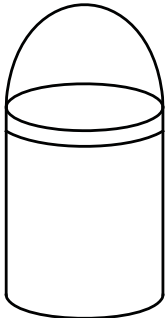
<3> Overview



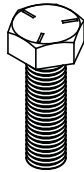
Sidewall Bracket Packages Part Numbers

		Sidewall Bracket Support Packages			
		21' [6.40 m]	24' [7.31 m]	27' [8.23 m]	30' [9.14 m]
Parts (and Part Numbers)	overall packages Part Numbers	4990400	4990396	4990395	4990402
	3987514, Left Hand leg	1	-	-	-
	3987515, Right Hand leg	1	-	-	-
	3497391, 21' leg	-	2	2	2
	3987513, mounting sleeve	4	4	4	4
	3989608, 8X8S1 tower diagonal 10' s	2	-	-	2
	3988414, 8X8S1 tower diagonal 5' s	-	4	-	-
	3988310, 4X4S1 tower diagonal 10' s	-	-	4	2
	3990920, sidewall bracket top cap	1	1	1	1
	3991206, adjusting sleeve	2	4	4	4
	3497398, Left Hand 3' S.W. bracket add-on	-	1	-	-
	3497399, Right Hand 3' S.W. bracket add-on	-	1	-	-
	3987503, Left Hand 6' S.W. bracket add-on	-	-	1	-
	3987502, Right Hand 6' S.W. bracket add-on	-	-	1	-
	3987517, Left Hand 9' S.W. bracket add-on	-	-	-	1
3987516, Right Hand 9' S.W. bracket add-on	-	-	-	1	

Hardware



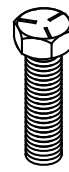
hardware package



90000177
3/4" x 2" bolt, grade 5



90000176
5/8" x 5" bolt, grade 5



90000078
5/8" x 2" bolt, grade 5



90000169
7/16" x 4 1/2" Bolt, grade 5



068951
3/4" lock washer



90010047
5/8" lock washer



90010030
7/16" lock washer



068900
3/4" hex nut



90005045
5/8" hex nut



1714682
7/16" hex nut

Sidewall Bracket Hardware Packages

	21' [6.40 m]	24' [7.31 m]	27' [8.23 m]	30' [9.14 m]
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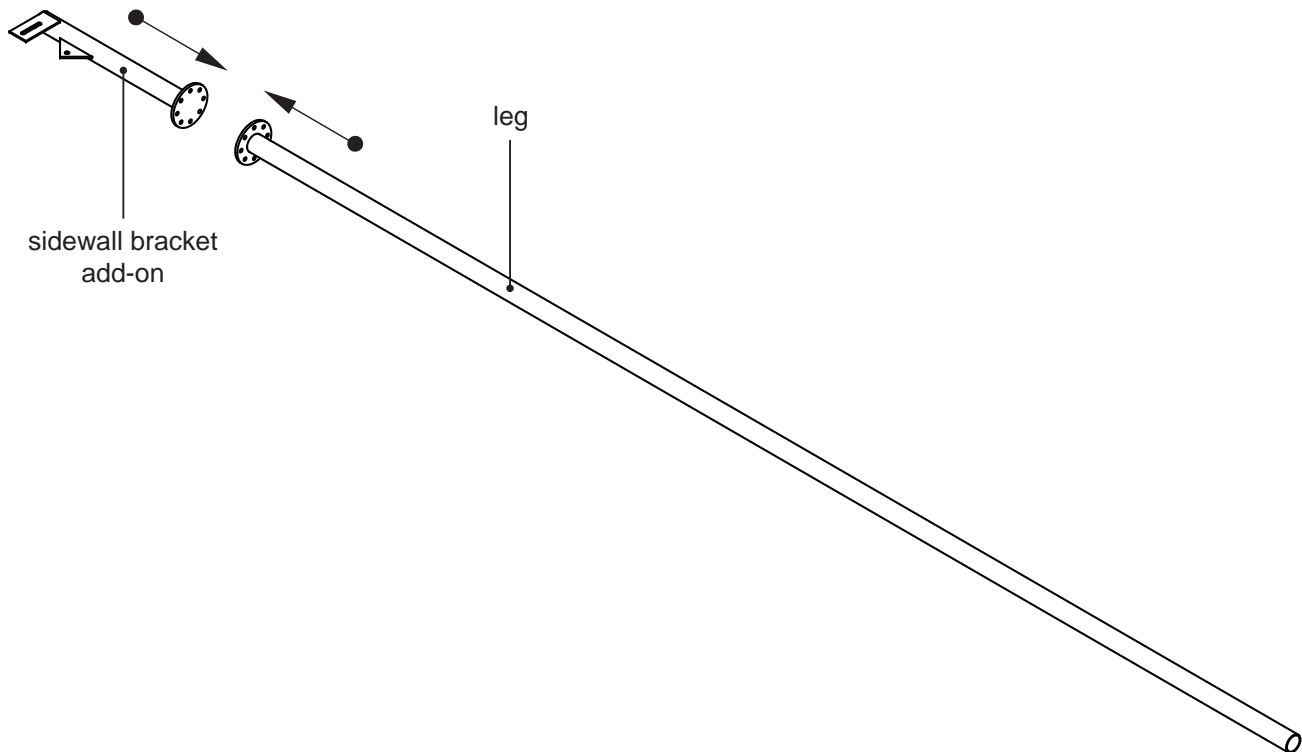
		21' [6.40 m]	24' [7.31 m]	27' [8.23 m]	30' [9.14 m]
Parts (and Part Numbers)	Hardware Packages Part Numbers	4300100	4300101	4300101	4300101
	068900, 3/4" hex nut	5	6	6	6
	068951, 3/4" lock washer	5	6	6	6
	1714682, 7/16" hex nut	1	2	2	2
	90000078, 5/8" x 2" bolt, grade 5	2	18	18	18
	90000169, 7/16" x 4 1/2" bolt, grade 5	1	2	2	2
	90000176, 5/8" x 5" bolt, grade 5	13	16	16	16
	90000177, 3/4" x 2" bolt, grade 5	4	6	6	6
	90005045, 5/8" hex nut	14	34	34	34
	90010030, 7/16" lock washer	1	2	2	2
	90010047, 5/8" lock washer	14	34	34	34
	018981, 3/8" x 1 1/4" bolt, grade 8	40	40	40	40

<4> Assembly

i IMPORTANT NOTE: If the Sidewall Bracket Support is installed on a newly constructed grain bin, install the sidewall bracket support to the grain bin when the bin top sidewall ring is assembled!

1

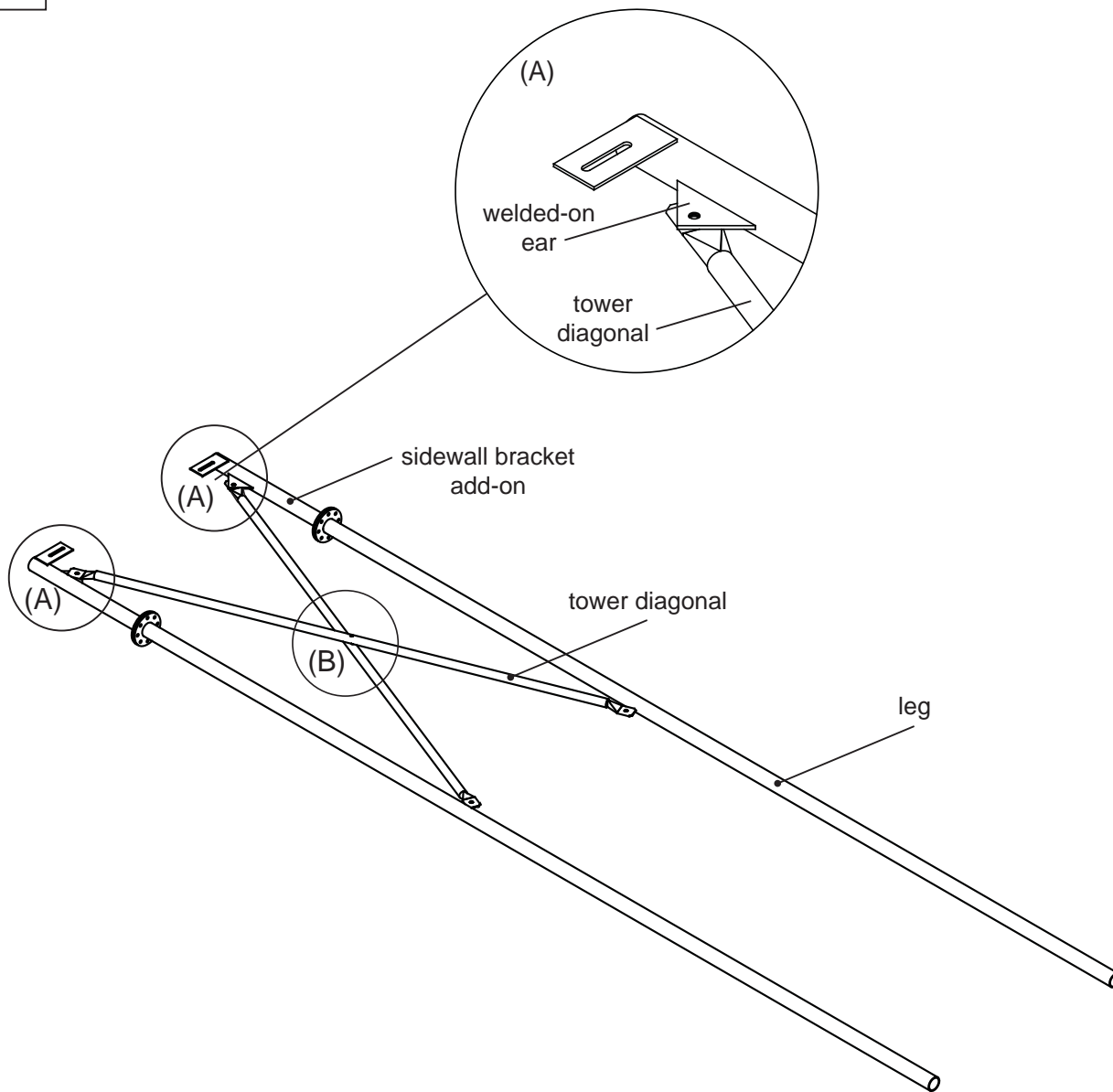
Sidewall Bracket Add-Ons



(A) If the assembly comes with legs only, skip this step and go to the next page. Connect the sidewall bracket add-ons to the legs. Use 5/8" x 2" grade 5 bolts, lock washers and nuts.

2

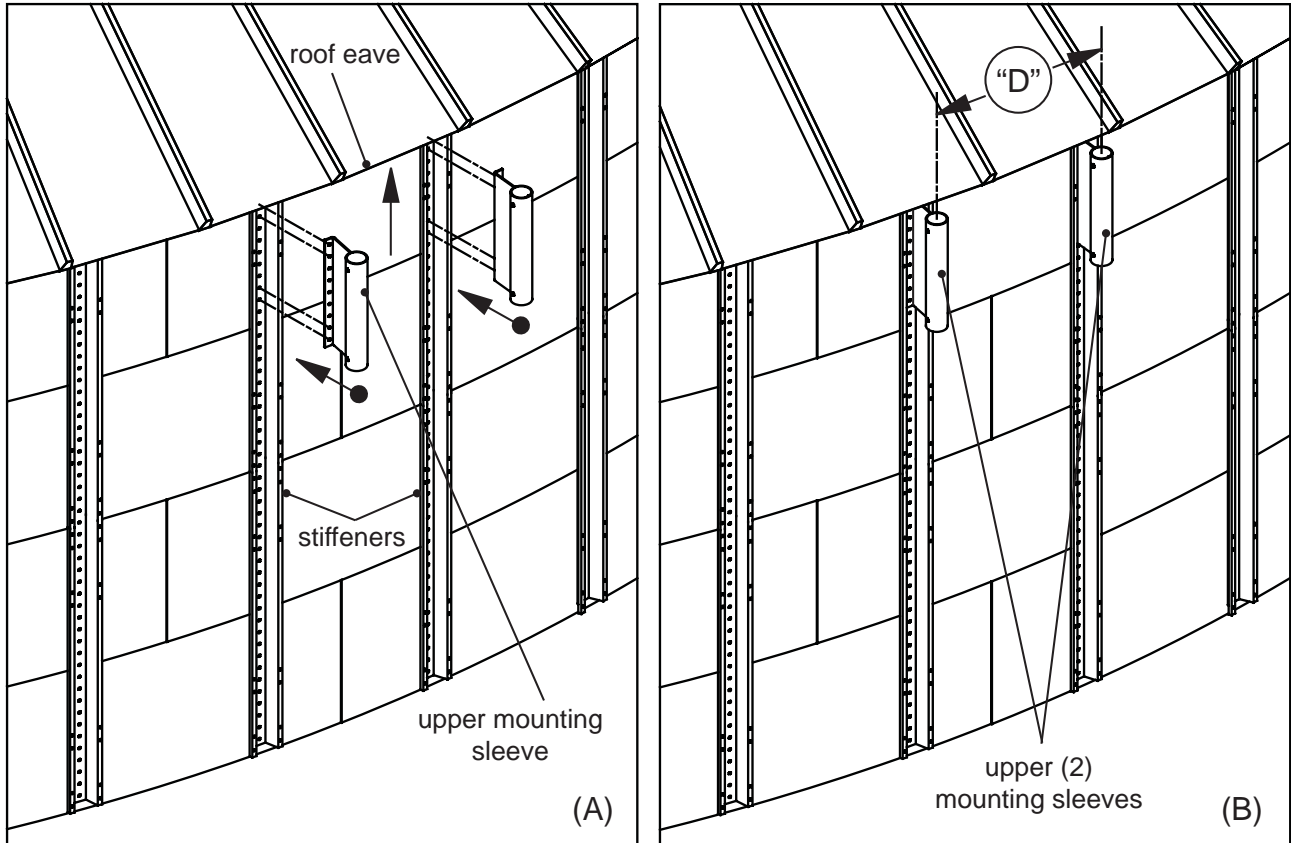
Tower Diagonals



(A) Loosely connect the tower diagonals to each of the welded-on ears (on the legs or sidewall bracket add-ons). Use 5/8" x 2" grade 5 bolts, lock washers, and nuts. (B) Loosely connect the tower diagonal center holes. Use 7/16" x 4 1/2" grade 2 bolts, lock washers, and nuts.

3

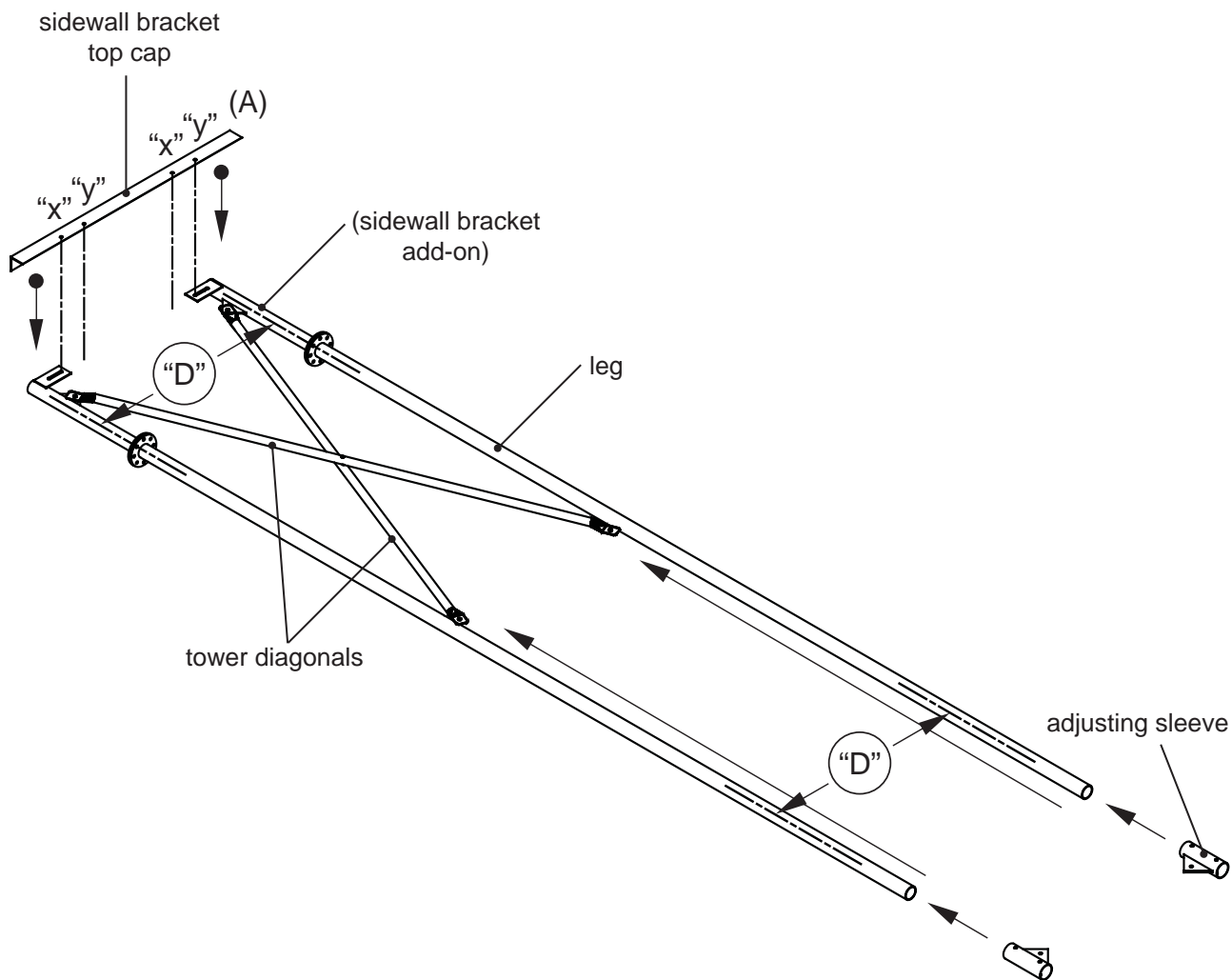
Upper Mounting Sleeves



(A) Connect the upper mounting sleeves to the stiffeners on the grain bin sidewall at the highest point on the top stiffeners below the roof eave. Use 3/8" bin bolts seal washers and nuts. Tighten all upper mounting sleeve bolts. (B) Measure the center to center distance "D" between the sidewall bracket mounting sleeves.

4

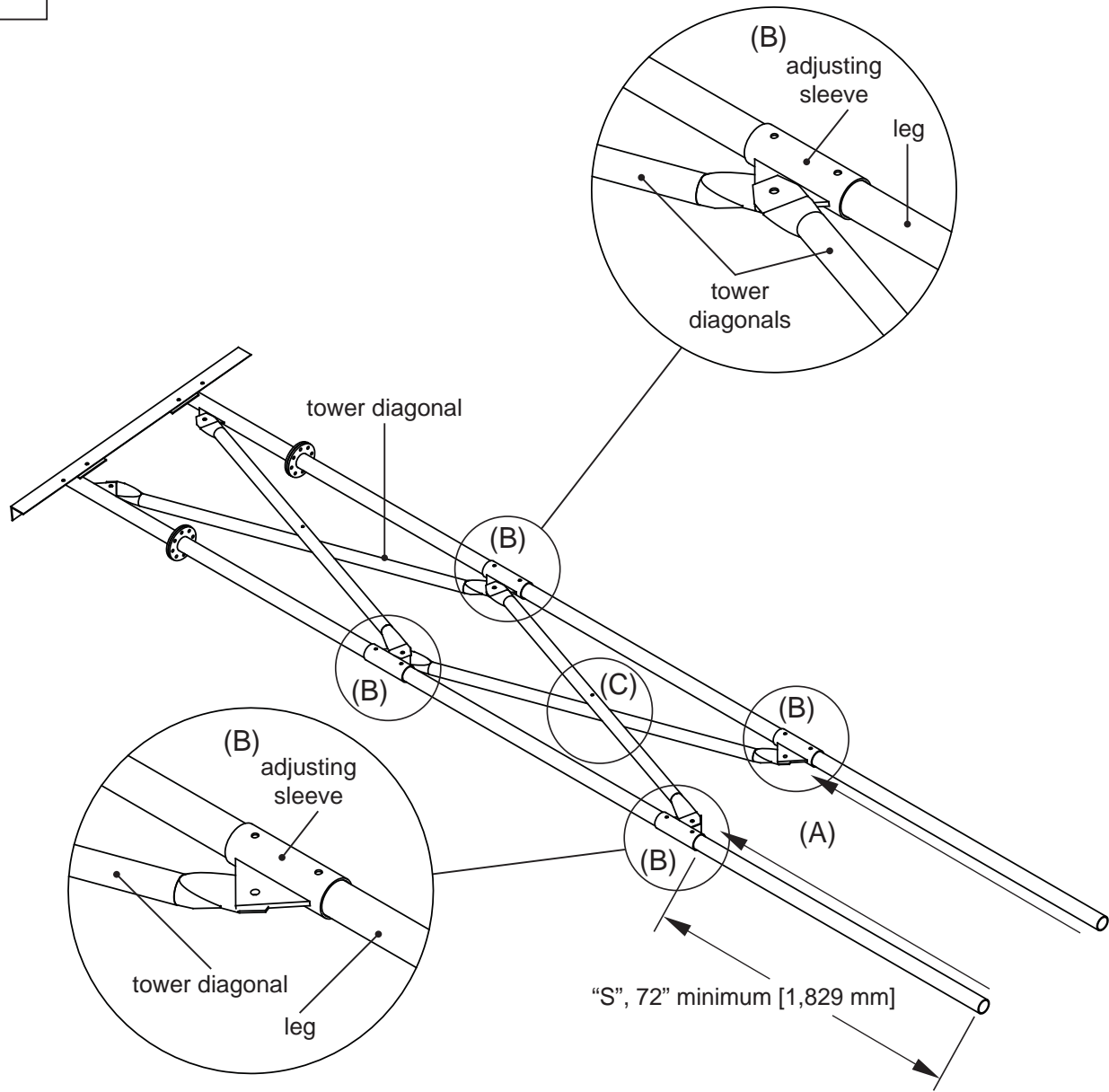
Top Cap



(A) Place the legs apart to match the center to center distance "D" in the previous step. Connect the 4" x 4" x 1/4" sidewall bracket top cap to the mounting tabs at the top of the legs (or sidewall bracket add-ons). Use the correct holes "x" or "y" for this installation. Use 5/8" x 2" grade 5 bolts, lock washers, and nuts. (B) Slip the adjusting sleeves onto the legs and slide them up to a position near the tower diagonals.

5

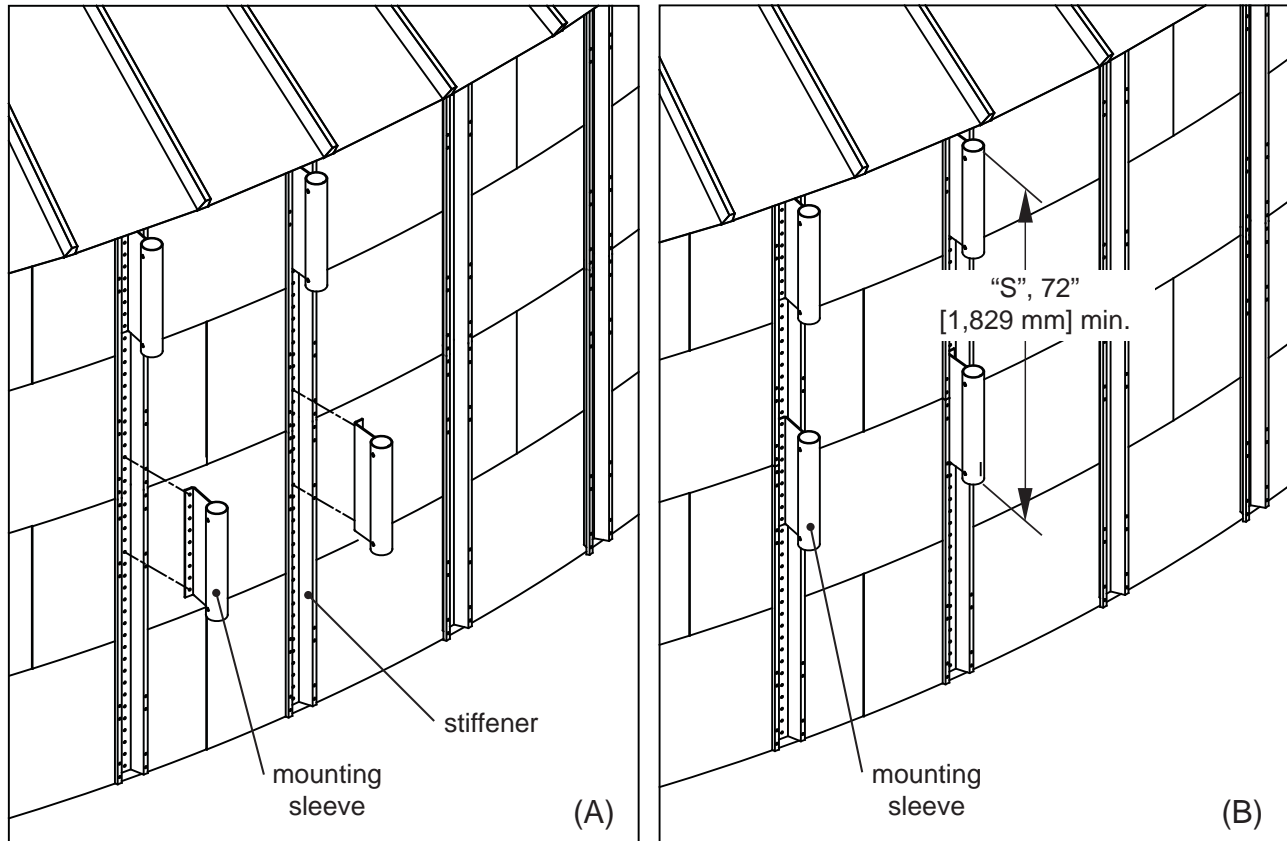
Adjusting Sleeves



(A) Slide on another (2) adjusting sleeves if your assembly includes (4) tower diagonals. (B) Loosely connect the tower diagonals to the adjusting sleeves as shown. Use 3/4" x 2" grade 5 bolts, lock washers and nuts. Maintain a minimum "S" of 72" [1,829 mm] between the bottom of the adjusting sleeve and the end of the leg. (C) Loosely connect the center holes of the tower diagonals. Use 7/16" x 4 1/2" grade 2 bolts, lock washers, and nuts.

6

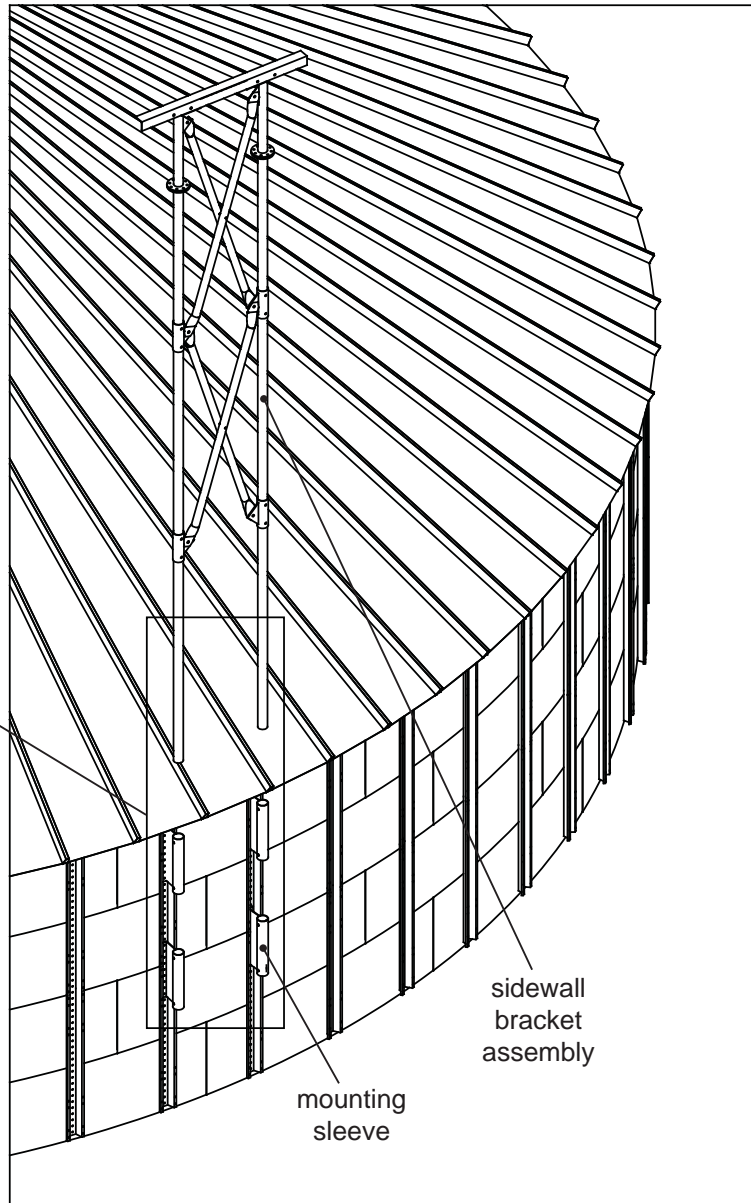
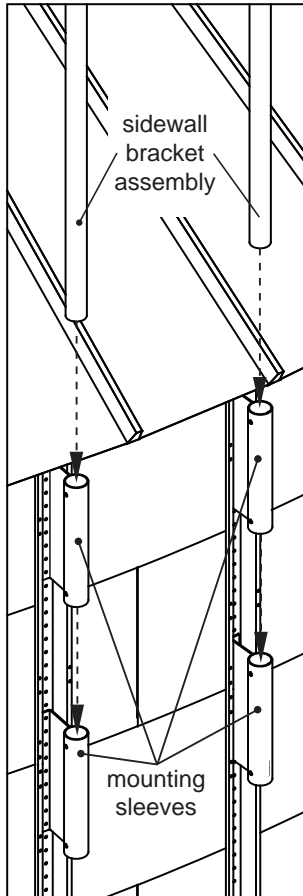
Lower Mounting Sleeves



(A) Connect the lower mounting sleeves to the stiffeners on the grain bin sidewall. (B) Make certain there is a minimum "S" of 72" [1,829 mm] from the top end of each upper mounting sleeve to the bottom end of each lower mounting sleeve. Use 3/8" bin bolts seal washers and nuts. Tighten mounting sleeve bolts.

7

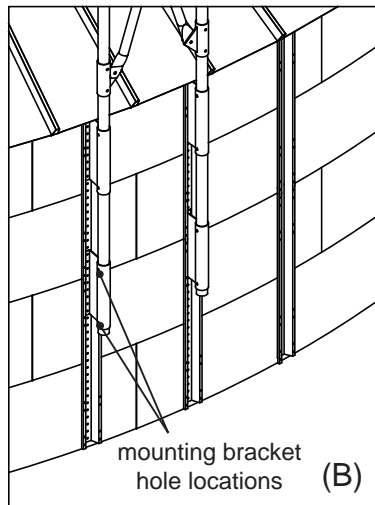
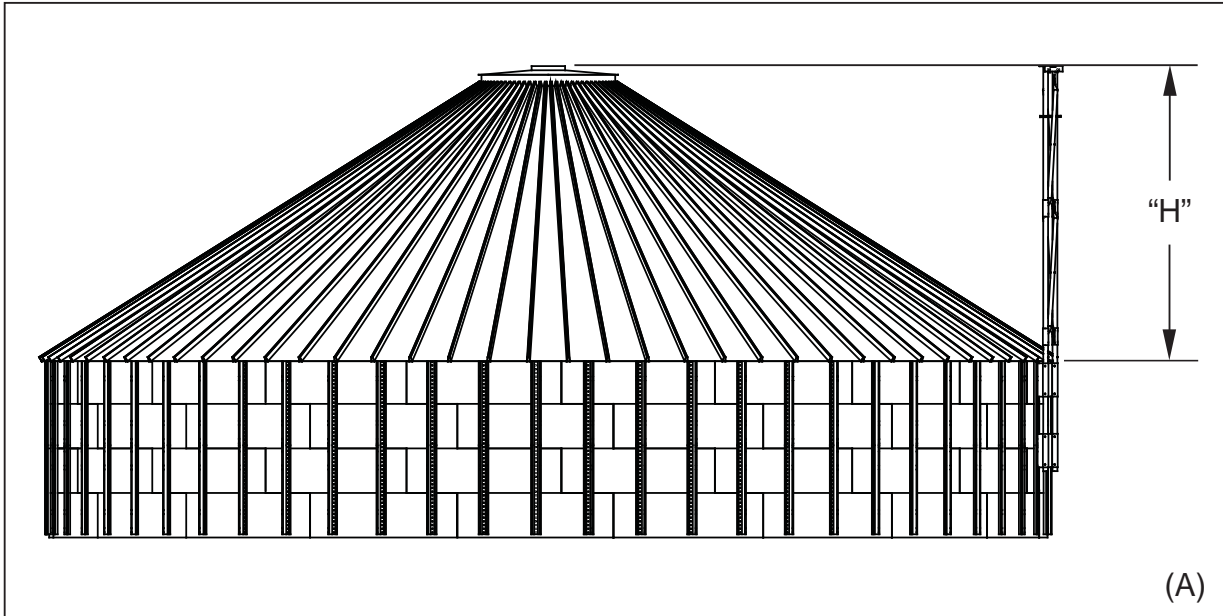
Install Legs Inside Mounting Sleeves



Hoist the sidewall bracket assembly and slip it down inside the mounting sleeves.

8

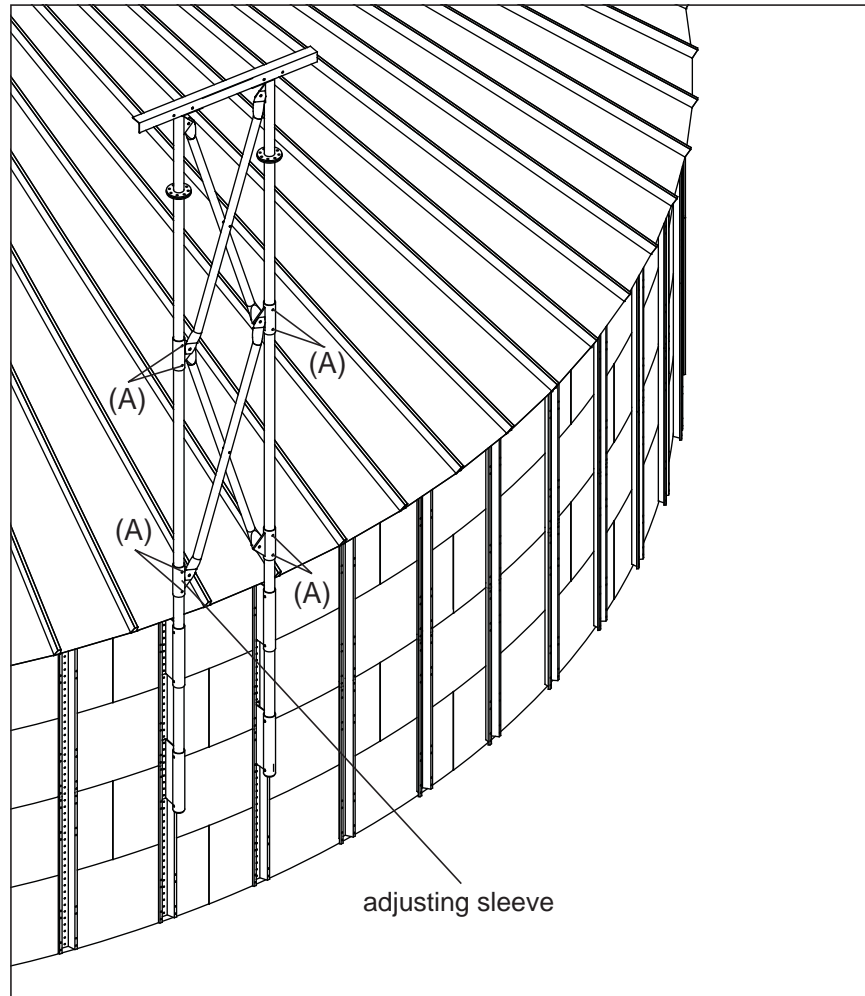
Set the Sidewall Bracket Height



(A) Place the sidewall bracket assembly at the right height “H” from the eave to the planned location for the catwalk base. See the Sidewall Manual to find the eave to peak dimension. Make certain the legs pass completely through both mounting brackets. (B) Field drill 21/32” holes through the legs at the 21/32” mounting bracket hole locations. Lock the legs in place by bolting through these holes. Securely tighten the bolts at this connection. (Hold the sidewall bracket assembly at the correct height until the mounting bracket bolts are tightened.)

9

Field Drill Adjusting Sleeve Holes

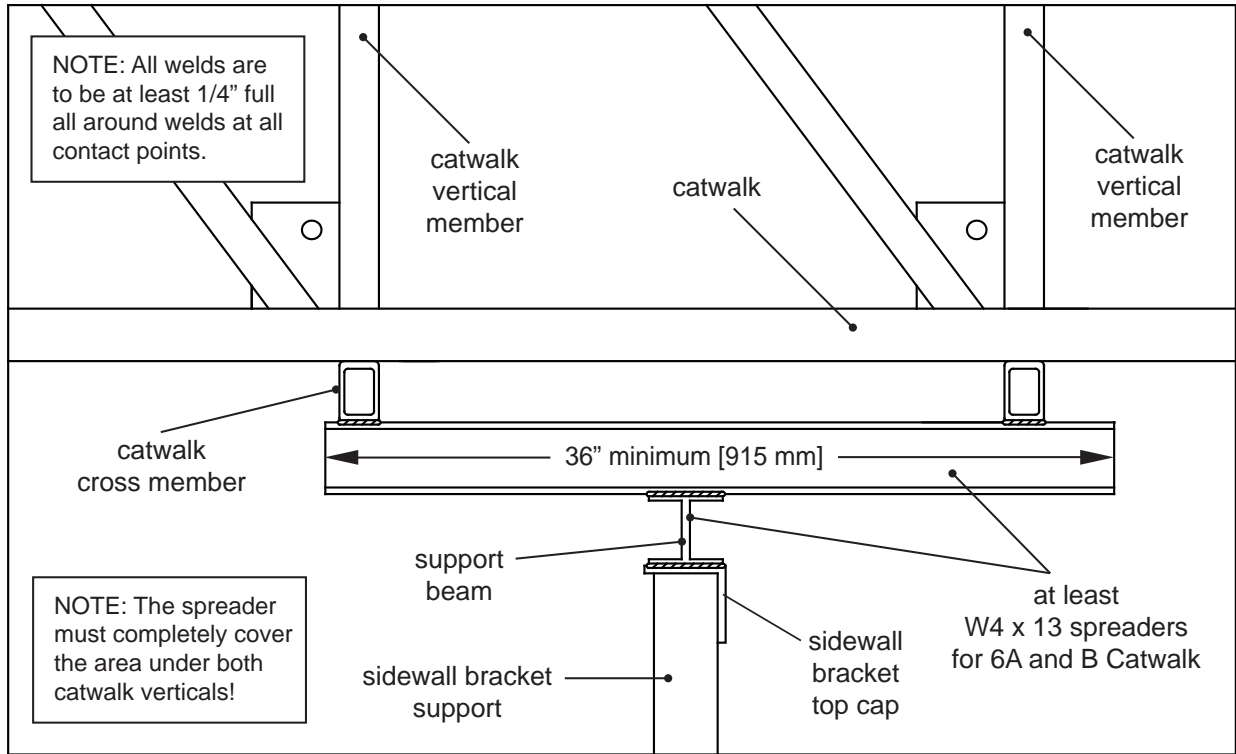
**WARNING!**

Securely tighten all bolts in the entire assembly!

(A) Field drill the holes in the legs at the adjusting sleeve locations. Lock the adjusting sleeves into place by bolting through the legs at these locations. Securely tighten all bolts in the entire assembly.

Complete the installation by adequately and completely securing the catwalk system to the Sidewall Bracket Support.

Weld Recommendations



Center the catwalk system on the top of the sidewall bracket top cap. Secure the catwalk system to the sidewall bracket top cap by welding in place all contact points. Spacers may be added under the catwalk system to increase the available weld contact area.

⚠ WARNING!

(1) If the sidewall bracket cannot be positioned directly under the catwalk trussing vertical members, spread the stress-load over at least 36" [915 mm] using an adequate support beam and W4 x 13 spreaders when using Brownie 6A and B Catwalks or W6 x 20 on Brownie 6C and D Catwalks. Weld the support beam to the sidewall bracket top cap and spreaders at all contact points. Locate the spreaders below at least (2) catwalk vertical members. Weld the spreaders to the catwalk trussing system at all contact points.

⚠ WARNING!

These are not instructions. These are suggestions only. Brownie Systems assumes no responsibility arising from these suggestions. Brownie Systems assumes no responsibility for the mounting of the catwalk to the Sidewall Bracket Support.

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Recent Significant Manual Changes:

2011-11-1 Rev. 01 Changes

- 1** Pages 1 and 28. A new manual cover replaced the old manual cover.
- 2** Page 3. The ISO read the manual graphic and English language note were added.
- 3** Page 4. The Contents were regenerated.
- 4** Pages 6 - 10. The safety information was updated.
- 5** Page 11. New standard and SI units bolt torque information was included.
- 6** Pages 15, 16, 17, 19, 22, and 24. Text changes were made.
- 7** Pages 25 - 26. The Index was regenerated.
- 8** Other minor changes were made throughout the manual.

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Brownie **SYSTEMS**

P. O. Box 2105 • 2928 East Highway 30
Grand Island, Nebraska 68802 - 2105, USA
TEL: 800-228-4285
FAX: 308-382-6954

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