



Manufactured by:
 Backyard Discovery
 3305 Airport Drive, Pittsburg, KS 66762
 800-856-4445

Basepoint Business Centre: Rivermead Drive, Westlea, Swindon SN5 7EX Phone: 0800-118-2476 J.P. Coenstraat 7, The Bridge, The Hague, 2595 WP, Netherlands Phone: 08005678990

12x10 STRATFORD, ASHFORD, HAWTHORNE PERGOLA

Model #'s : 2105089B, 2105096B, 2105102B



2105089B STRATFORD (BLACK)



2105096B ASHFORD (BROWN)



Electrical enclosure available only in North America



2105102 HAWTHORNE (WHITE)

Please visit www.backyarddiscovery.com
 For the most up to date assembly manual, to register your product, or to order replacement parts *Para obtener instrucciones en español, visite* www.backyarddiscovery.com



EASY STEP-BY-STEP
 3D INTERACTIVE INSTRUCTIONS
 DOWNLOAD THE FREE APP



ONLY AVAILABLE IN NORTH AMERICA



INSTALLATION SERVICES AVAILABLE!

See inside for details
 ONLY AVAILABLE IN THE US



It is critically important that you start with square and level footings, concrete pad or deck to attach your structure

- Pay close attention to the items needed for each step. Make sure you are using the correct hardware for each step. Using incorrect hardware may result in improper assembly
- Remember to double check for underground utilities and overhead electrical lines

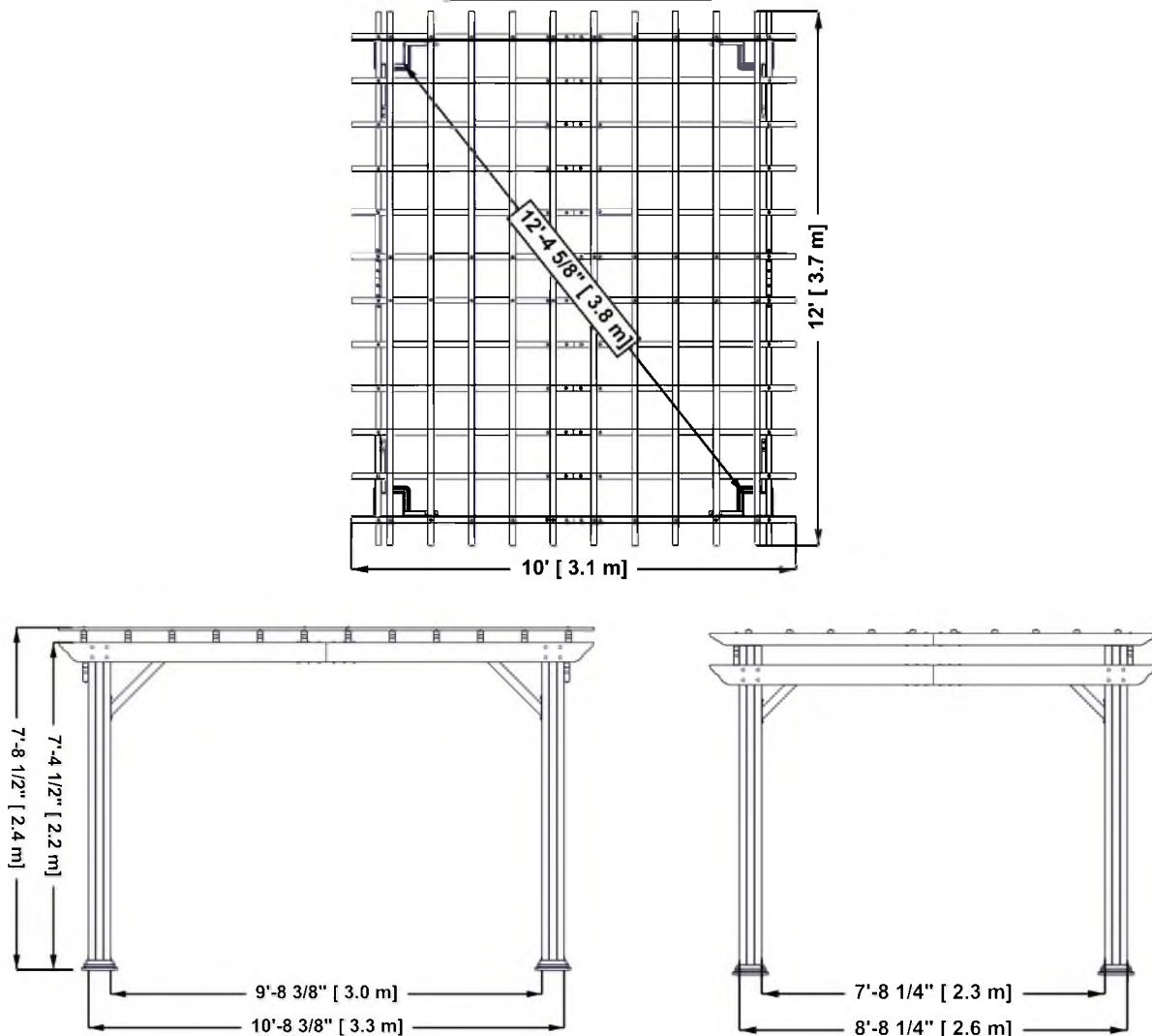
Post mounts are provided with your structure which allows you to permanently install your structure to a pre-existing or new wood or concrete surface.

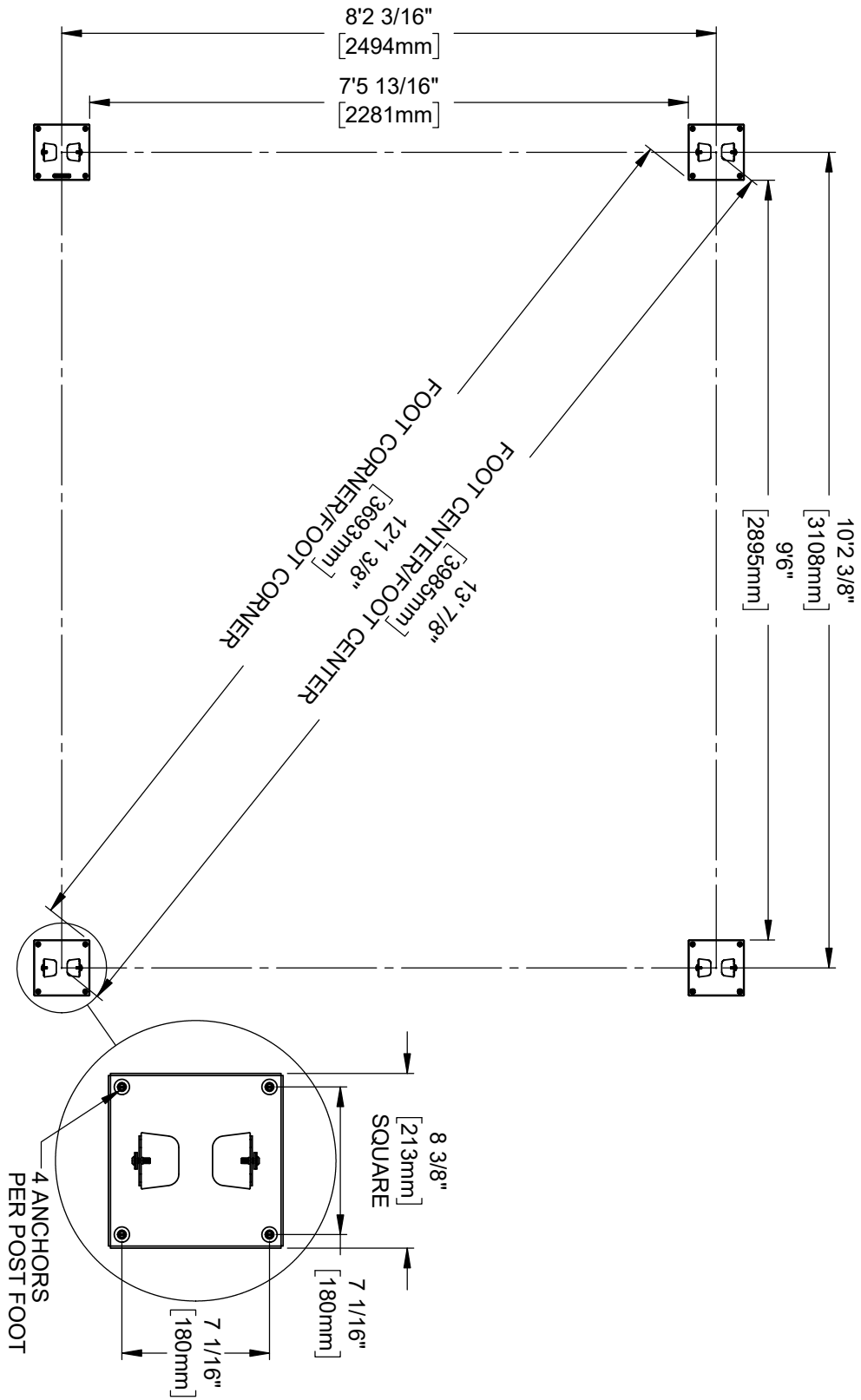
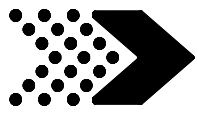
- The hardware to attach the post mounts to the structure is included.
- The hardware to mount the structure permanently to a concrete surface is NOT included.
- The hardware to mount the structure permanently to a wood deck is NOT included and will need to be purchased separately. **You must ensure there is ample structural support under the deck before permanently attaching.**

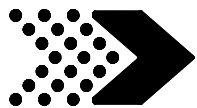
Metal Roof Assembly

Remove plastic covering from metal roof panels before installing each piece. Place roofing materials on a nonabrasive, flat surface before and after assembly as it could bend, dent or scratch

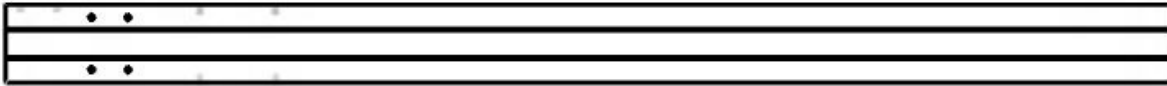
Overall Dimensions



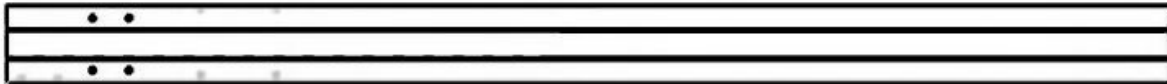




Metal Components (Not to Scale)



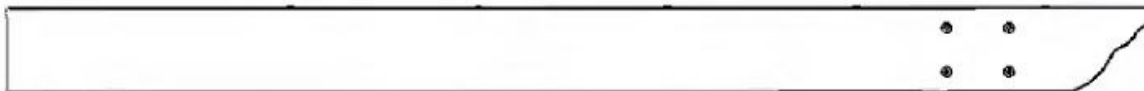
A1 POST - A4M01565
(2) 6"x6"x88" (152x152x2235)



A2 POST - A4M01566
(2) 6"x6"x88" (152x152x2235)



B1 JOIST END - A4M01567
(2) 1 3/8"x5 1/4"x72 1/8" (36x134x1833)



B2 JOIST END - A4M01568
(2) 1 3/8"x5 1/4"x72 1/8" (36x134x1833)



C1 JOIST END - A4M01563
(2) 1 3/8"x5 1/4"x60 1/8" (36x134x1526)



C2 JOIST END - A4M01564
(2) 1 3/8"x5 1/4"x60 1/8" (36x134x1526)



D1 JOIST END - A4M01569
(8) 1 5/8"x3 1/8"x60 1/8" (40x80x1526)



D2 JOIST END - A4M01285
(16) 1 5/8"x3 1/8"x60 1/8" (40x80x1526)



Metal Components (Not to Scale)



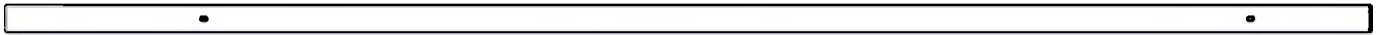
J1 | SPLICE BRACKET - A4M01269
(2) | 1 1/4"x5 1/8"x19 5/8" (33x131x500)



J3 | SPLICE BRACKET - A4M01271
(12) | 1 1/2"x3"x15 3/4" (37x77x400)



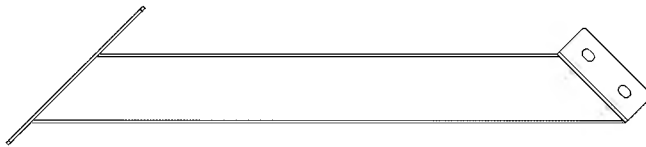
J2 | SPLICE BRACKET - A4M01270
(2) | 1 1/4"x5 1/8"x15 3/4" (33x131x400)



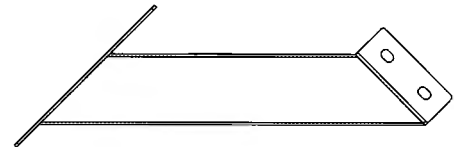
E1 | PURLIN END - A4M01289
(10) | 3/4"x1 5/8"x77 5/8" (20x40x1972)



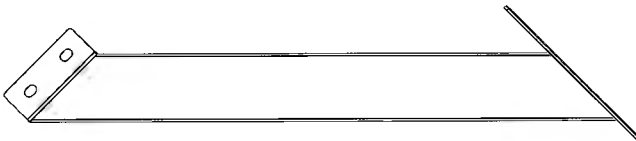
E2 | PURLIN END - A4M01290
(10) | 3/4"x1 5/8"x66 7/8" (20x40x1698)



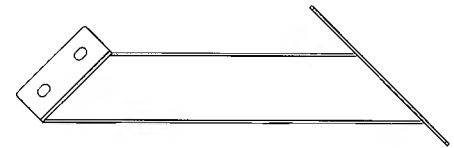
F1 | LONG ANGLE BRACE - A4M01273
(2) | 1 1/8"x4"x21 1/2" (30x101x546)



F3 | SHORT ANGLE BRACE - A4M01275
(2) | 1 1/8"x4"x14" (30x101x355)



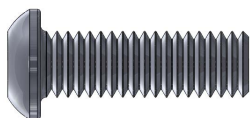
F2 | LONG ANGLE BRACE - A4M01274
(2) | 1 1/8"x4"x21 1/2" (30x101x546)



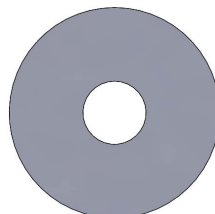
F4 | SHORT ANGLE BRACE - A4M01276
(2) | 1 1/8"x4"x14" (30x101x355)



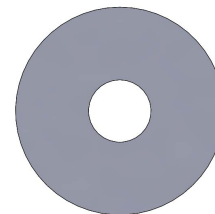
Hardware Components



H101101 | TORX PAN HEAD
(186) | 1/4-20x3/4"



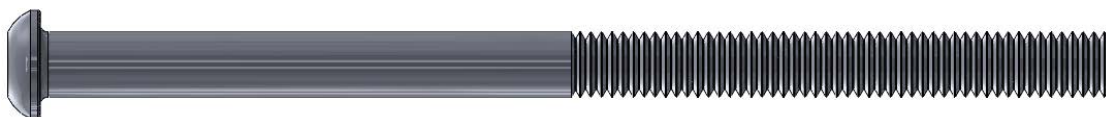
H101053 | STEEL WASHER
(250) | 6x20



H101054 | SEALANT WASHER
(250)



H101107 | TORX PAN HEAD
(42) | 1/4-20x1 1/2"



H101102 | TORX PAN HEAD
(26) | 1/4-20x4"



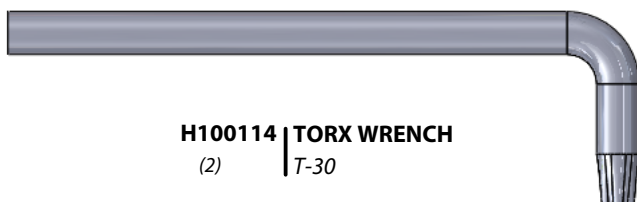
H101103 | TORX SOCKET SCREW
(34) | 1/4-20



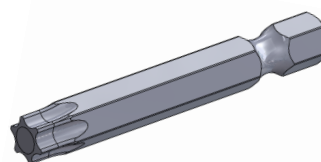
H100120 | SCREW CONCRETE ANCHOR
(17) | 1/4x2



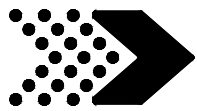
H100630 | WASHER FLAT BLK
(17) | 8x19



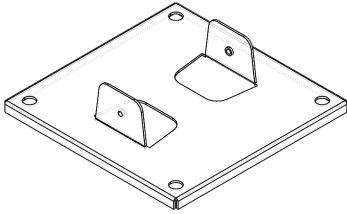
H100114 | TORX WRENCH
(2) | T-30



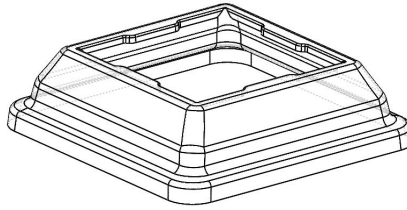
H100147 | TORX BIT
(2) | T-30



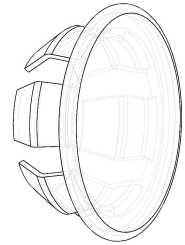
Accessory Components (Not to Scale)



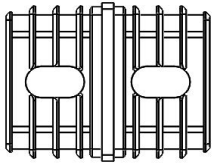
G1 | POST FOOT PLATE - A4M01278
(4) | 2 1/8"x8 3/8"x8 3/8" (54x213x213)



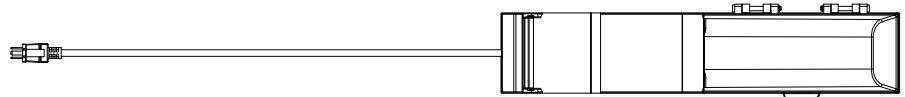
G2 | POST FOOT - A4M01279
(4) | 2 5/8"x9 7/8"x9 7/8" (68x250x250)



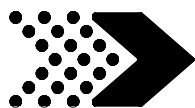
H1 | HOLE COVER - A4M01352
(32)



H2 | 2-WAY SQUARE PLUG- A6P00465
(10) | 3/4"x1 5/8"x2" (20x40x52)



9205413 | ELECTRICAL ENCLOSURE
(x1)



PRE-ASSEMBLY STEP 1

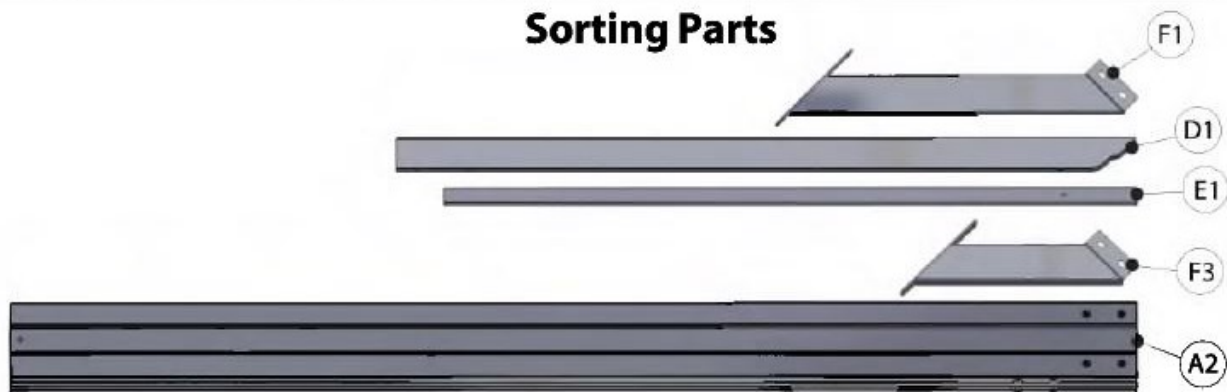
SORTING PARTS



ASSEMBLY TIP:

Keep an eye out for these boxes which will contain helpful pictures and information making the assembly process as quick and painless as possible.

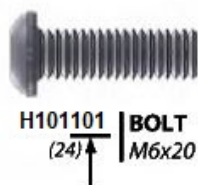
Sorting Parts



When removing the parts from the boxes we recommend arranging them by part number before you begin assembly. This will allow for faster assembly and easily identify any parts that may be missing or damaged.

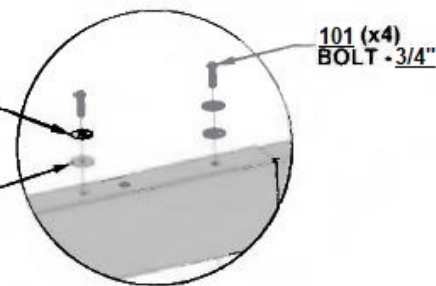
Hardware is identified with a seven digit alpha-numeric part number. During assembly you only need to reference the last three digits of the part number as noted in each step. This will make finding the correct hardware easier.

Hardware Identification



053 (x4)
STEEL WASHER - 6x20

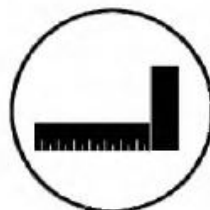
054 (x4)
RUBBER WASHER - 6x20



Tools Required



Some steps in the assembly process will require a second set of hands. Make sure you have a helper available.



You will need to make sure that your assembly is square before fully tightening your bolts.



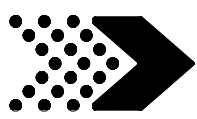
For proper assembly you will need to ensure that your structure is level before proceeding to the next step.



A tape measure may be needed to check overall dimensions to ensure structure is square.



A ladder will be needed for assembly. DO NOT stand or climb on any part of the structure at any point. Doing so may result in injury.



PRE-ASSEMBLY STEP 2 CHOOSE YOUR ASSEMBLY METHOD

There are several types of assembly instructions available to you.

1. Printed Assembly Manual included with your set
2. BILT APP - 3D interactive instructions
3. Combination of the Printed Manual and BILT APP (Note: Step numbers can differ between the two methods)

BILT.

**Scan for easy
3D instructions**

Download the BILT app
before you begin

Download on the
App Store

GET IT ON
Google Play

The advertisement features the BILT logo at the top left, a QR code at the top right, and two buttons for downloading the app on the App Store and Google Play. Below this is a smartphone screen displaying a 3D assembly instruction. The screen shows a triangular frame with a horizontal beam attached to its top vertex. A small 'Hardware Needed' label is visible in the top left corner of the app interface. The smartphone screen also shows a step number '17' in the bottom left and navigation controls in the bottom right.



PERGOLA ASSEMBLY

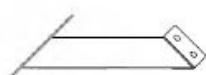
STEP 1



C1 | JOIST END - A4M01563
(2) | 1 3/8"x5 1/4"x60 1/8" (36x134x1526)



J2 | SPLICE BRACKET - A4M01270
(2) | 1 1/4"x5 1/8"x15 3/4" (33x131x400)



F3 | SHORT ANGLE BRACE - A4M01275
(2) | 1 1/8"x4"x14" (30x101x355)



H101101 | TORX PAN HEAD
(16) | 1/4-20x3/4"



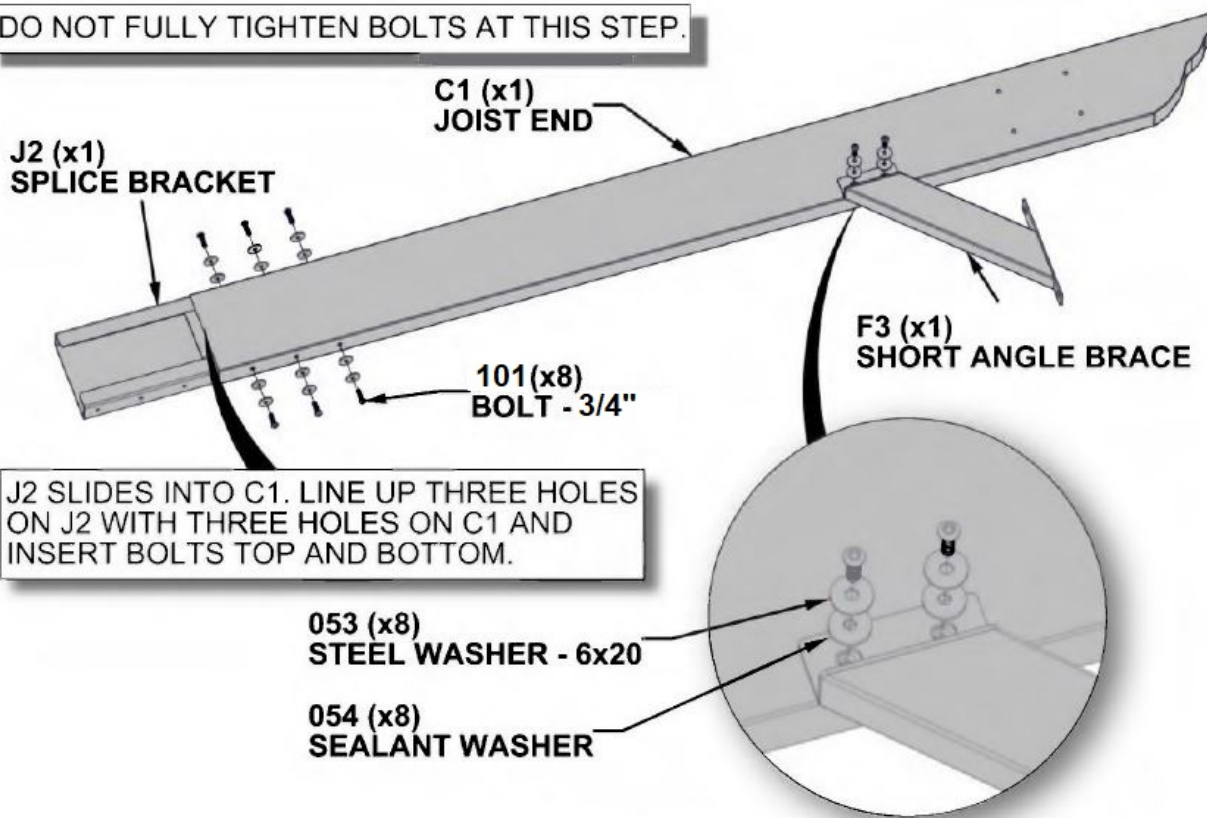
H101053 | STEEL WASHER
(16) | 6x20



H101054 | SEALANT WASHER
(16)



DO NOT FULLY TIGHTEN BOLTS AT THIS STEP.

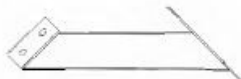


J2 SLIDES INTO C1. LINE UP THREE HOLES ON J2 WITH THREE HOLES ON C1 AND INSERT BOLTS TOP AND BOTTOM.

COMPLETE THIS STEP TWICE.



C2 JOIST END - A4M01564
(2) | 1 3/8"x5 1/4"x60 1/8" (36x134x1526)



F4 SHORT ANGLE BRACE - A4M01276
(2) | 1 1/8"x4"x14" (30x101x355)



H101101 TORX PAN HEAD
(16) | 1/4-20x3/4"

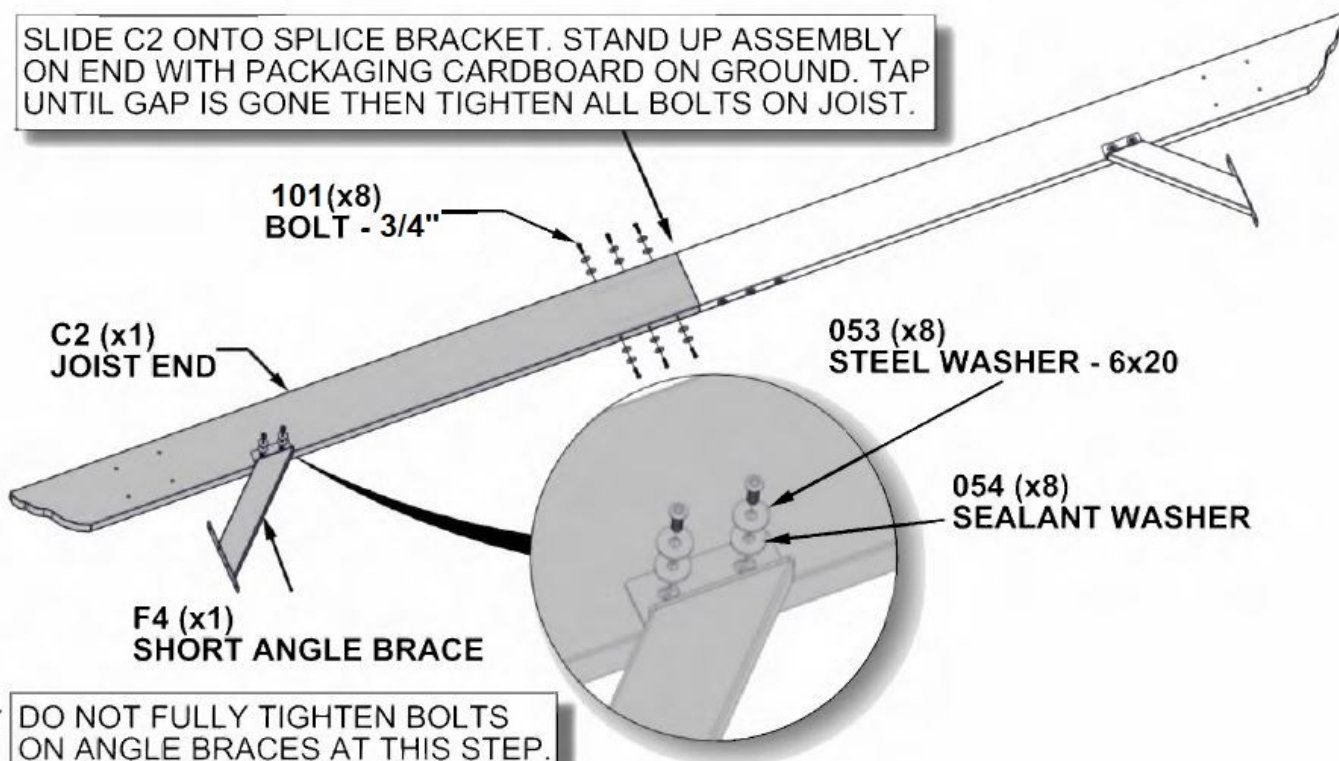


H101053 STEEL WASHER
(16) | 6x20



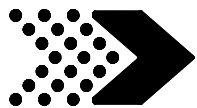
H101054 SEALANT WASHER
(16)

SLIDE C2 ONTO SPLICE BRACKET. STAND UP ASSEMBLY ON END WITH PACKAGING CARDBOARD ON GROUND. TAP UNTIL GAP IS GONE THEN TIGHTEN ALL BOLTS ON JOIST.



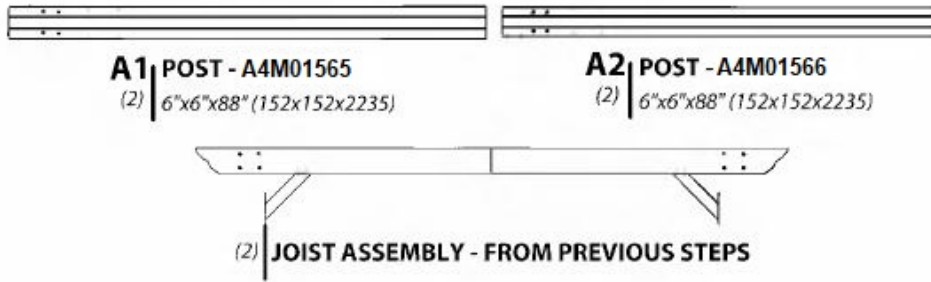
DO NOT FULLY TIGHTEN BOLTS ON ANGLE BRACES AT THIS STEP.

COMPLETE THIS STEP TWICE.



PERGOLA ASSEMBLY

STEP 3



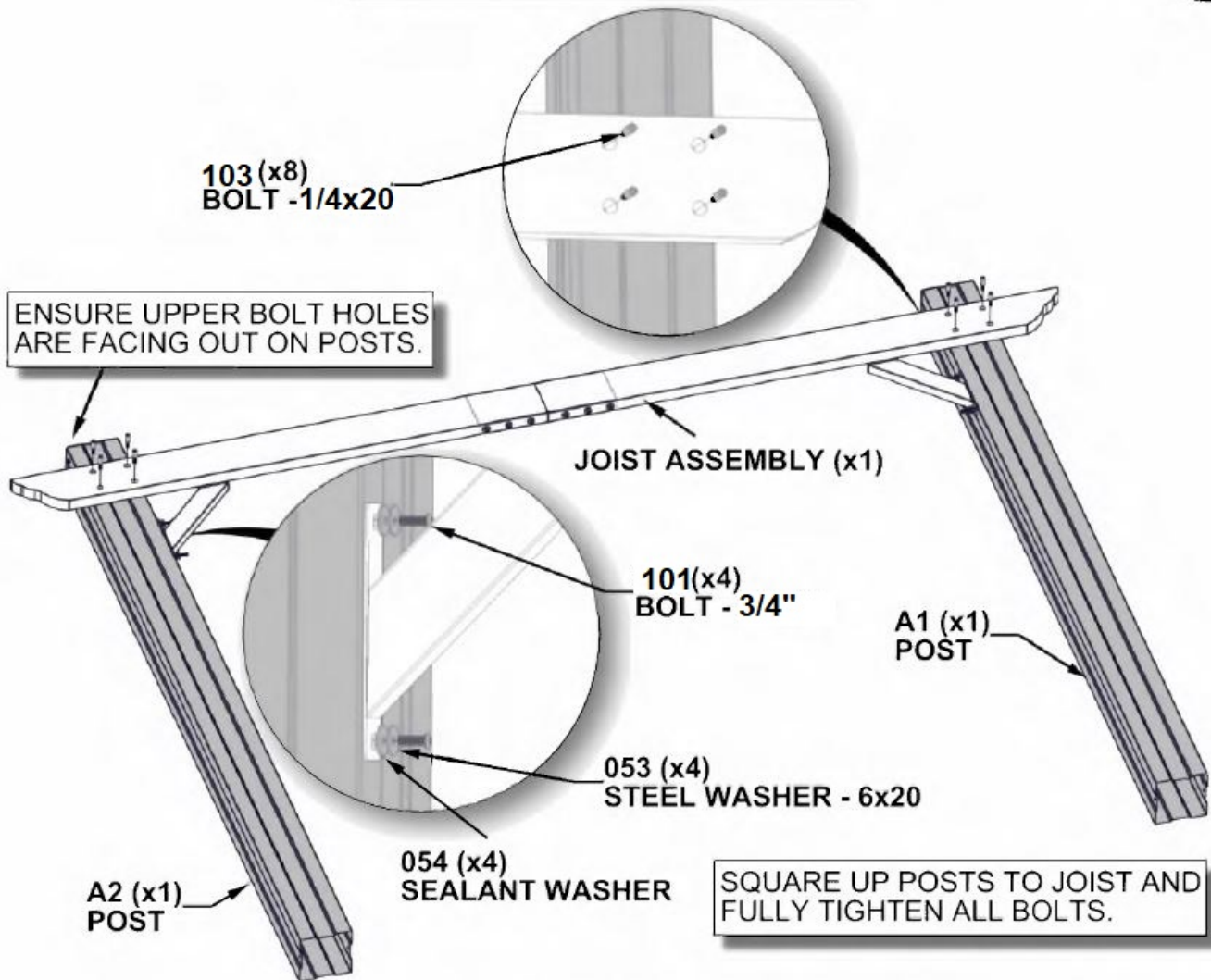
H101101 | TORX PAN HEAD
(8) | 1/4-20x3/4"

H101053 | STEEL WASHER
(8) | 6x20

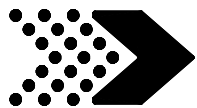
H101103 | TORX SOCKET SCREW
(16) | 1/4-20

H101054 | SEALANT WASHER
(8)

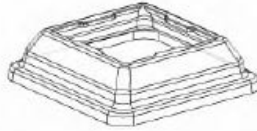
LAY PARTS ON GROUND OR SAW HORSES FOR EASE OF ASSEMBLY.



REPEAT THIS STEP FOR OTHER UPRIGHT ASSEMBLY.



G1 | POST FOOT PLATE - A4M01278
(4) | 2 1/8"x8 3/8"x8 3/8" (54x213x213)



G2 | POST FOOT - A4M01279
(4) | 2 5/8"x9 7/8"x9 7/8" (68x250x250)



H101101 | TORX PAN HEAD
(8) | 1/4-20x3/4"



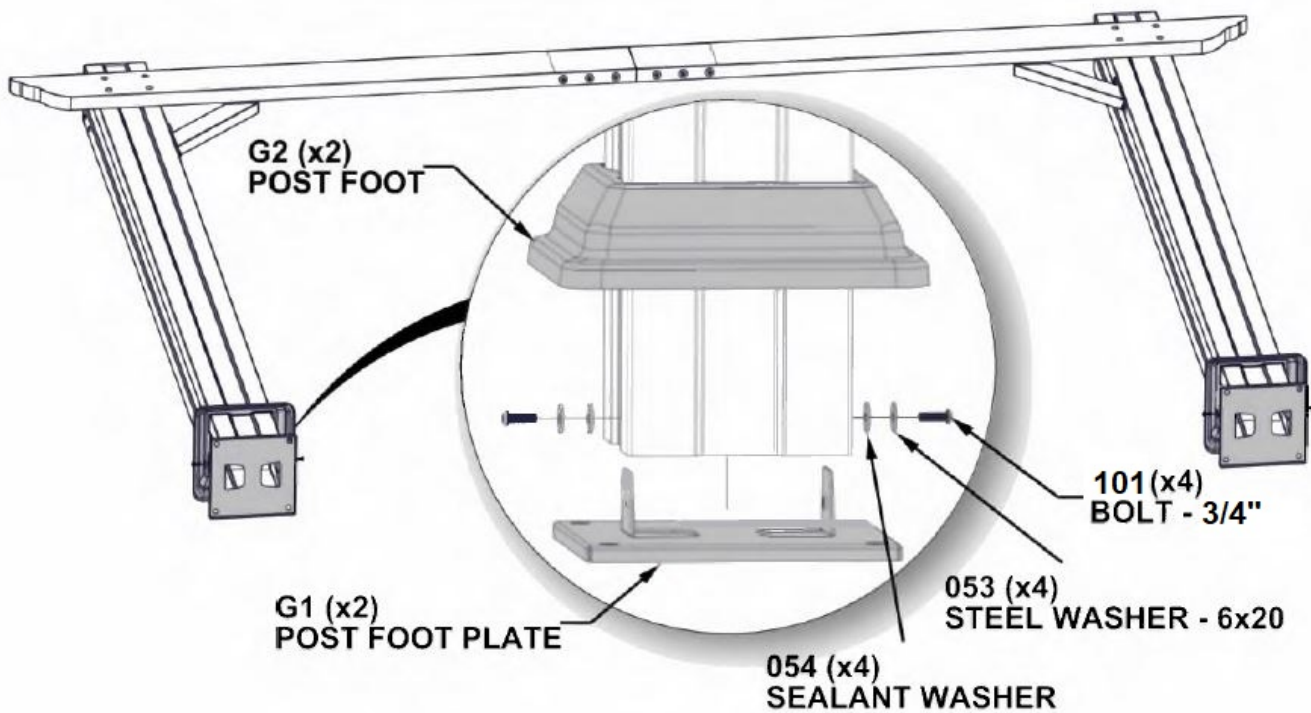
H101053 | STEEL WASHER
(8) | 6x20



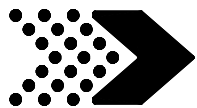
H101054 | SEALANT WASHER
(8)



SLIDE A POST FOOT ONTO EACH POST THEN BOLT ON POST FOOT PLATES TO EACH POST. VERTICAL TAB ON POST FOOT PLATE LINES UP WITH HOLES ON SIDE OF POST.



REPEAT THIS STEP FOR OTHER UPRIGHT ASSEMBLY.



B1 | JOIST END - A4M01567
(2) | 1 3/8"x5 1/4"x72 1/8" (36x134x1833)



F1 | LONG ANGLE BRACE - A4M01273
(2) | 1 1/8"x4"x21 1/2" (30x101x546)



J1 | SPLICE BRACKET - A4M01269
(2) | 1 1/4"x5 1/8"x19 5/8" (33x131x500)



H101101 | TORX PAN HEAD
(16) | 1/4-20x3/4"



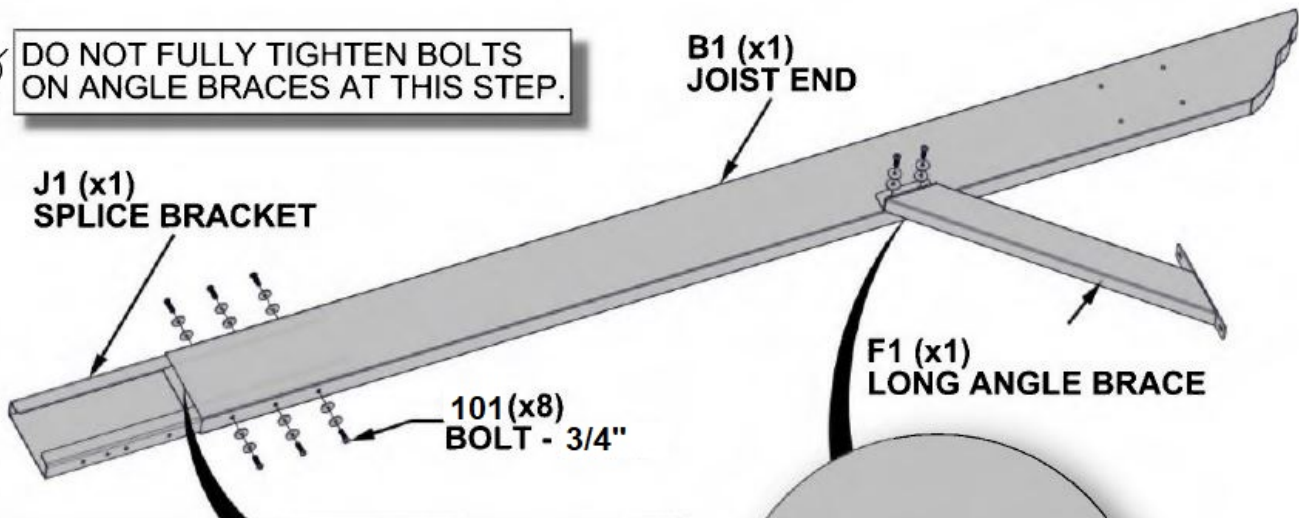
H101053 | STEEL WASHER
(16) | 6x20



H101054 | SEALANT WASHER
(16)



DO NOT FULLY TIGHTEN BOLTS ON ANGLE BRACES AT THIS STEP.



J1 (x1)
SPLICE BRACKET

B1 (x1)
JOIST END

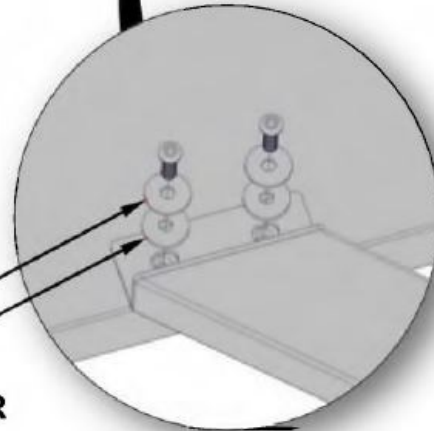
F1 (x1)
LONG ANGLE BRACE

101 (x8)
BOLT - 3/4"

J1 SLIDES INTO B1. LINE UP THREE HOLES ON J1 WITH THREE HOLES ON B1 AND INSERT BOLTS TOP AND BOTTOM.

053 (x8)
STEEL WASHER - 6x20

054 (x8)
SEALANT WASHER



REPEAT THIS STEP FOR OTHER JOIST ASSEMBLY.



B2 JOIST END - A4M01568
(2) | 1 3/8"x5 1/4"x72 1/8" (36x134x1833)



F2 LONG ANGLE BRACE - A4M01274
(2) | 1 1/8"x4"x21 1/2" (30x101x546)



H101101 TORX PAN HEAD
(16) | 1/4-20x3/4"

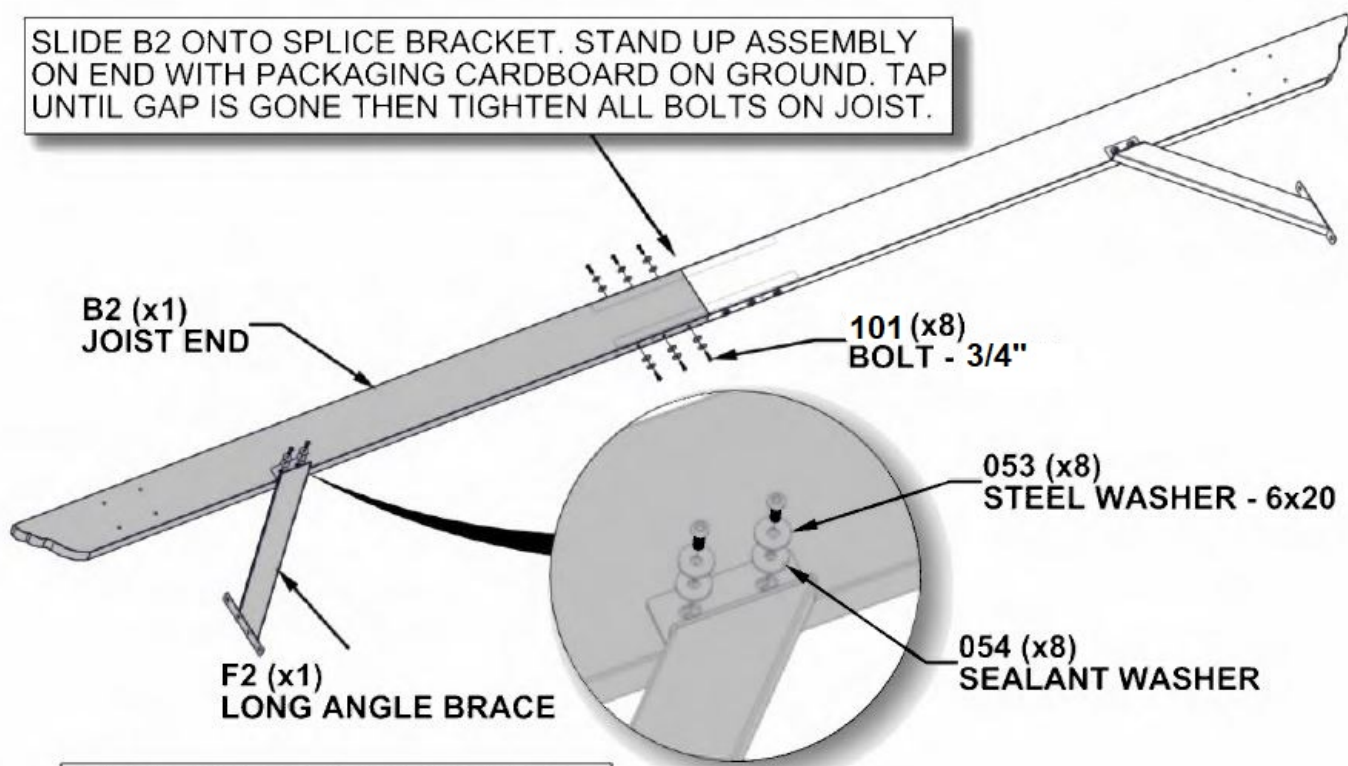


H101053 STEEL WASHER
(16) | 6x20



H101054 SEALANT WASHER
(16)

SLIDE B2 ONTO SPLICE BRACKET. STAND UP ASSEMBLY ON END WITH PACKAGING CARDBOARD ON GROUND. TAP UNTIL GAP IS GONE THEN TIGHTEN ALL BOLTS ON JOIST.



B2 (x1)
JOIST END

101 (x8)
BOLT - 3/4"

053 (x8)
STEEL WASHER - 6x20

F2 (x1)
LONG ANGLE BRACE

054 (x8)
SEALANT WASHER



DO NOT FULLY TIGHTEN BOLTS ON ANGLE BRACES AT THIS STEP.

REPEAT THIS STEP FOR OTHER JOIST ASSEMBLY.



PERGOLA ASSEMBLY

STEP 7



(2) JOIST ASSEMBLY - FROM PREVIOUS STEPS



(2) UPRIGHT ASSEMBLY - FROM PREVIOUS STEPS



H101101 | TORX PAN HEAD
(8) | 1/4-20x3/4"



H101053 | STEEL WASHER
(8) | 6x20

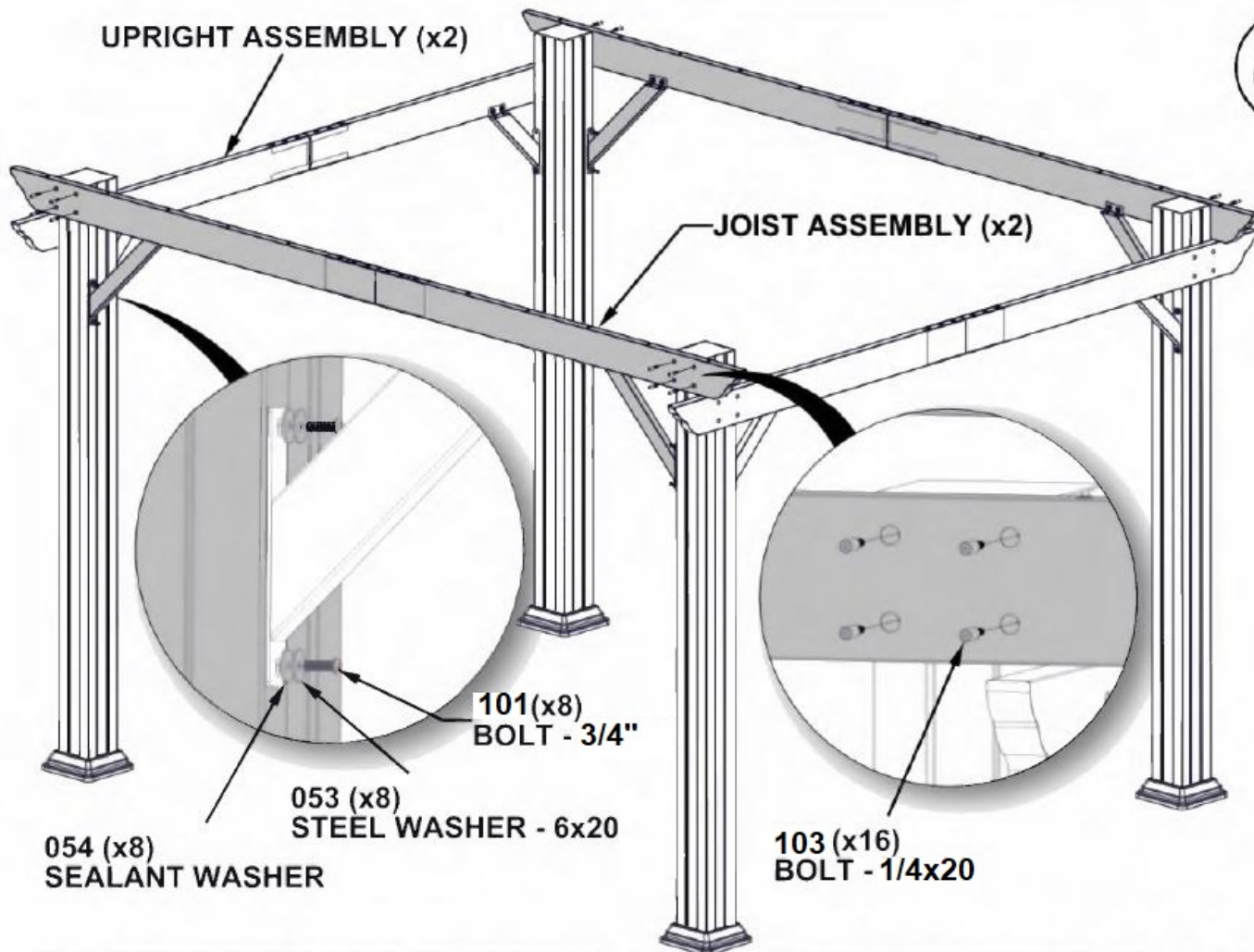
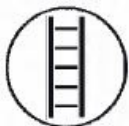


H101103 | TORX SOCKET HEAD
(16) | 1/4-20



H101054 | SEALANT WASHER
(8) |

WITH BOTH UPRIGHT ASSEMBLIES STANDING, ONE JOIST ASSEMBLY IS BOLTED ON WITHOUT FULLY TIGHTENING BOLTS. ONCE ONE JOIST ASSEMBLY IS BOLTED ON, BOLT ON SECOND JOIST ASSEMBLY.



SQUARE UP ALL POSTS TO JOIST ASSEMBLIES AND FULLY TIGHTEN ALL BOLTS.

NOTE: A THIRD PERSON IS HELPFUL FOR THIS STEP.



D1 JOIST END - A4M01569
(4) | 1 5/8"x3 1/8"x60 1/8" (40x80x1526)



J3 SPLICE BRACKET - A4M01271
(4) | 1 1/2"x3"x15 3/4" (37x77x400)



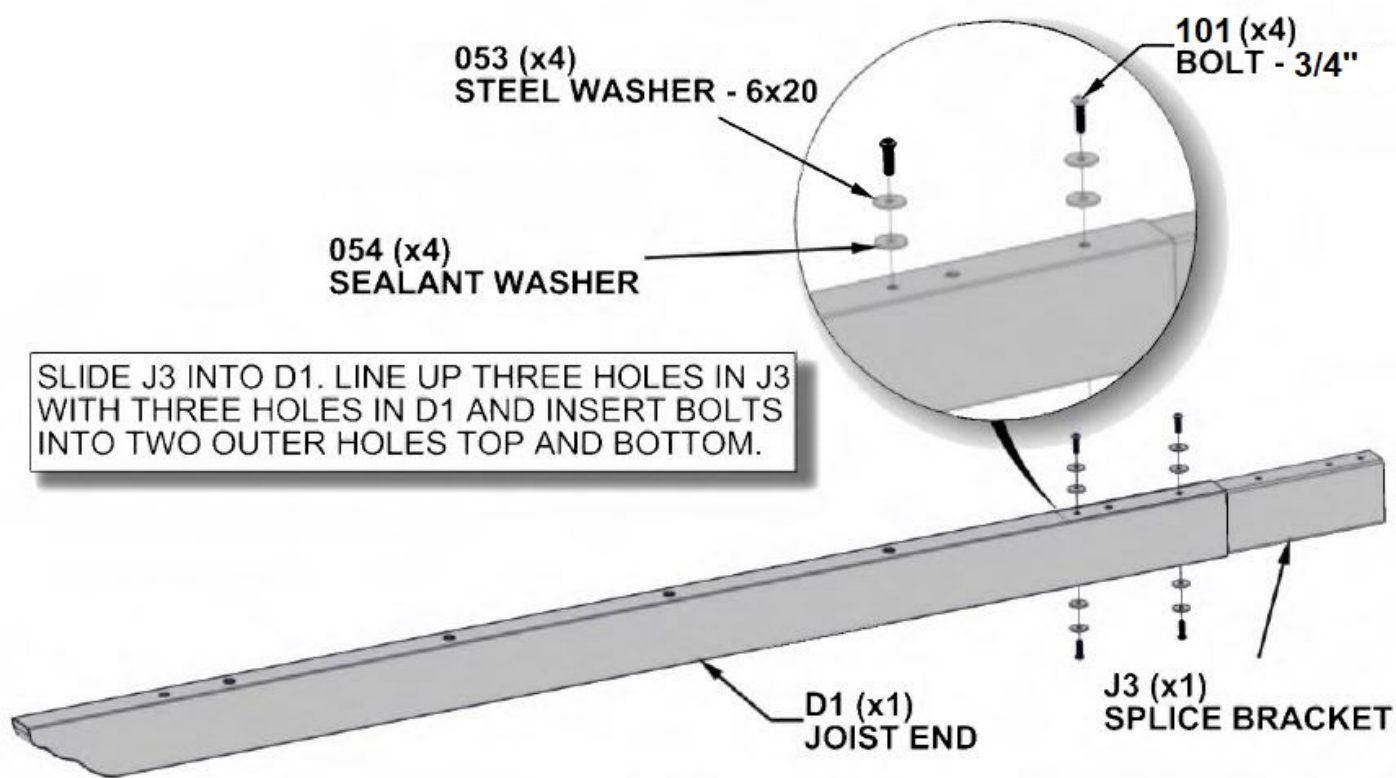
H101101 TORX PAN HEAD
(16) | 1/4-20x3/4"



H101053 STEEL WASHER
(16) | 6x20



H101054 SEALANT WASHER
(16)



SLIDE J3 INTO D1. LINE UP THREE HOLES IN J3 WITH THREE HOLES IN D1 AND INSERT BOLTS INTO TWO OUTER HOLES TOP AND BOTTOM.



DO NOT FULLY TIGHTEN BOLTS AT THIS STEP.

COMPLETE THIS STEP FOUR TIMES.



D1 | **JOIST END - A4M01569**
(4) | 1 5/8"x3 1/8"x60 1/8" (40x80x1526)



H101101 | **TORX PAN HEAD**
(16) | 1/4-20x3/4"

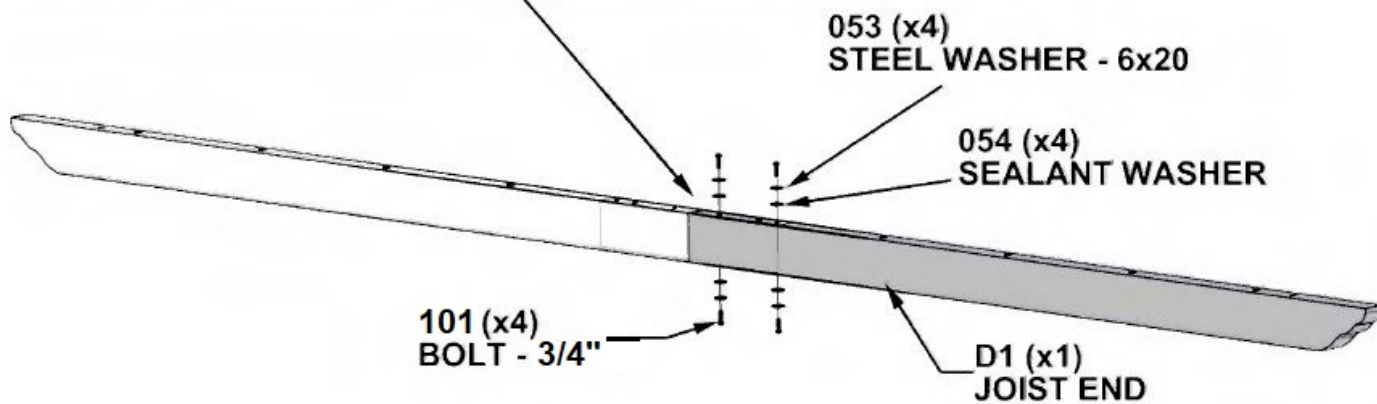


H101053 | **STEEL WASHER**
(16) | 6x20



H101054 | **SEALANT WASHER**
(16)

SLIDE D1 ONTO SPLICE BRACKET. STAND UP ASSEMBLY ON END WITH PACKAGING CARDBOARD ON GROUND. TAP UNTIL GAP IS GONE THEN TIGHTEN ALL BOLTS ON JOIST.



COMPLETE THIS STEP FOUR TIMES.



(4) JOIST ASSEMBLY - FROM PREVIOUS STEPS



H101102 | TORX PAN HEAD
(8) | 1/4-20x4"

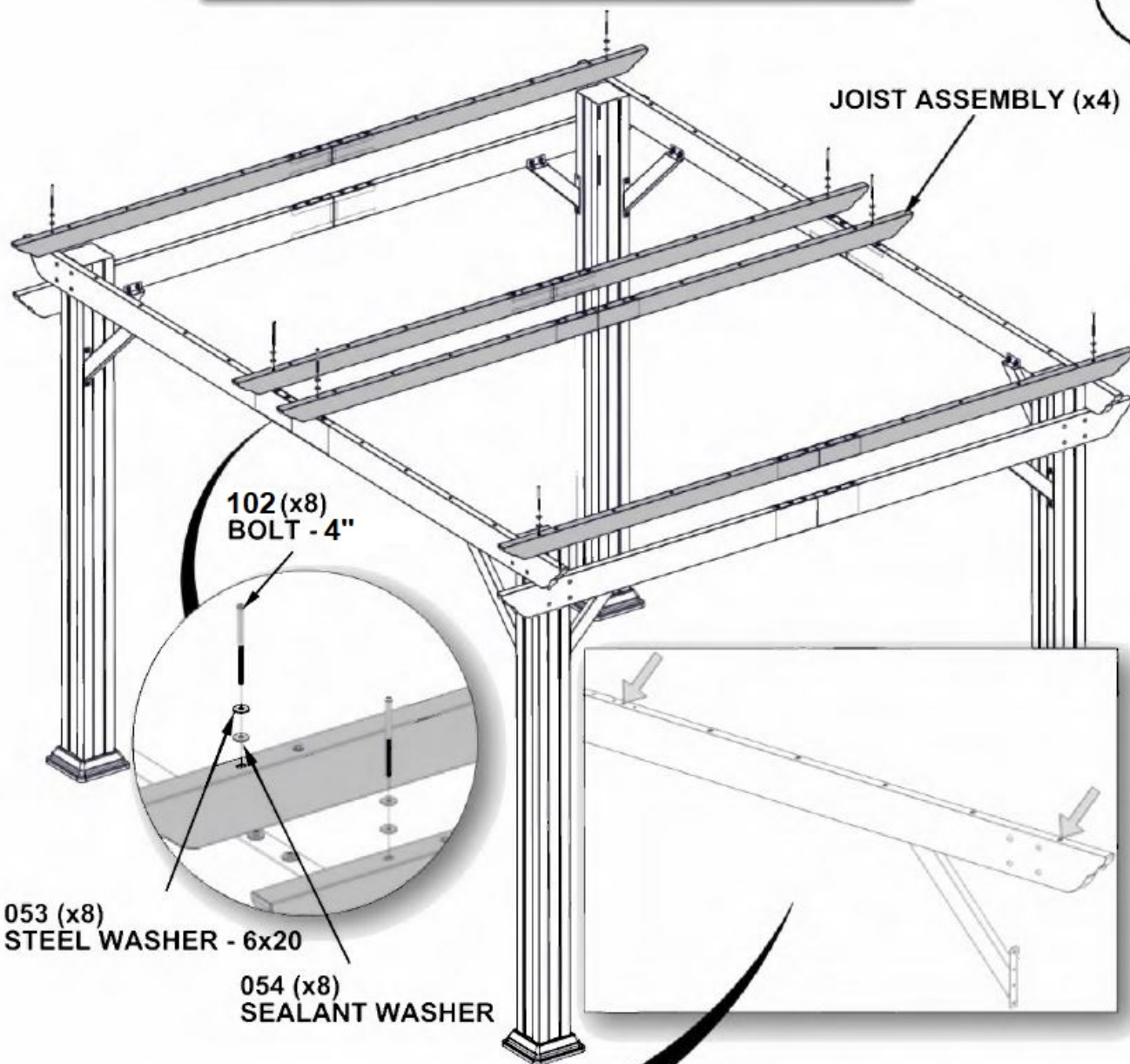


H101053 | STEEL WASHER
(8) | 6x20

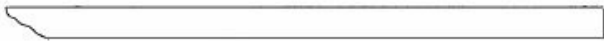


H101054 | SEALANT WASHER
(8)

BOLT ONE SIDE OF JOISTS FIRST THEN BOLT OTHER SIDE. DO NOT FULLY TIGHTEN BOLTS AT THIS STEP.



ENSURE JOIST ASSEMBLIES ARE SPACED OUT CORRECTLY AS PLACEMENT IS CRITICAL FOR PURLIN ATTACHMENT.



D2 JOIST END - A4M01285
(8) | 1 5/8"x3 1/8"x60 1/8" (40x80x1526)



J3 SPLICE BRACKET - A4M01271
(8) | 1 1/2"x3"x15 3/4" (37x77x400)



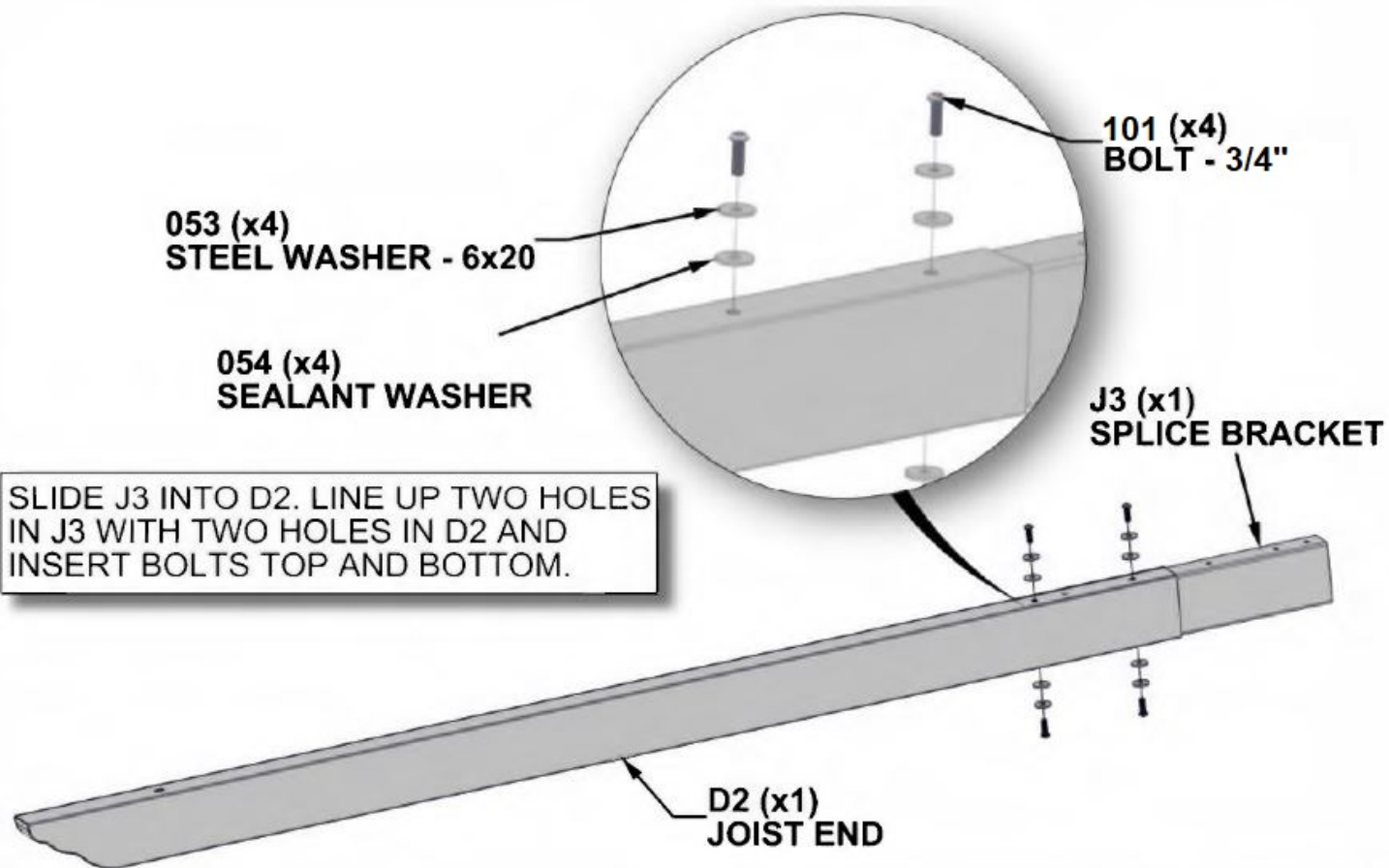
H101101 TORX PAN HEAD
(32) | 1/4-20x3/4"



H101053 STEEL WASHER
(32) | 6x20



H101054 SEALANT WASHER
(32)



SLIDE J3 INTO D2. LINE UP TWO HOLES IN J3 WITH TWO HOLES IN D2 AND INSERT BOLTS TOP AND BOTTOM.



DO NOT FULLY TIGHTEN BOLTS AT THIS STEP.

COMPLETE THIS STEP EIGHT TIMES.



D2 JOIST END - A4M01285
(8) | 1 5/8"x3 1/8"x60 1/8" (40x80x1526)



H101101 TORX PAN HEAD
(32) | 1/4-20x3/4"

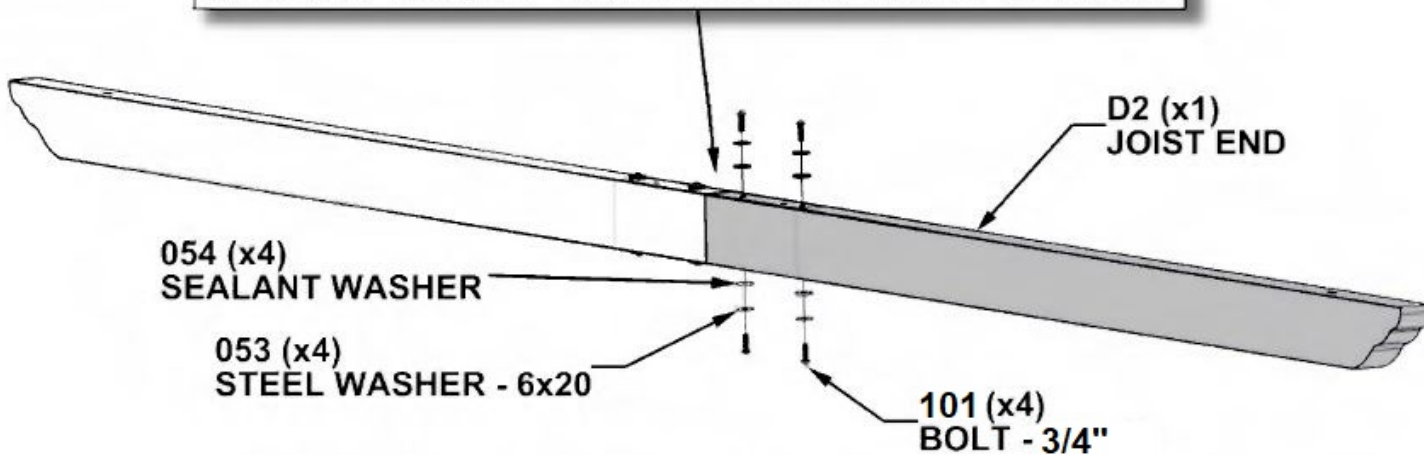


H101053 STEEL WASHER
(32) | 6x20

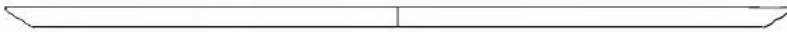
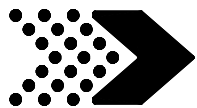


H101054 SEALANT WASHER
(32)

SLIDE D2 ONTO SPLICE BRACKET. STAND UP ASSEMBLY ON END WITH PACKAGING CARDBOARD ON GROUND. TAP UNTIL GAP IS GONE THEN TIGHTEN ALL BOLTS ON JOIST.



COMPLETE THIS STEP EIGHT TIMES.



(8) JOIST ASSEMBLY - FROM PREVIOUS STEPS



H101102 | TORX PAN HEAD
(16) | 1/4-20x4"



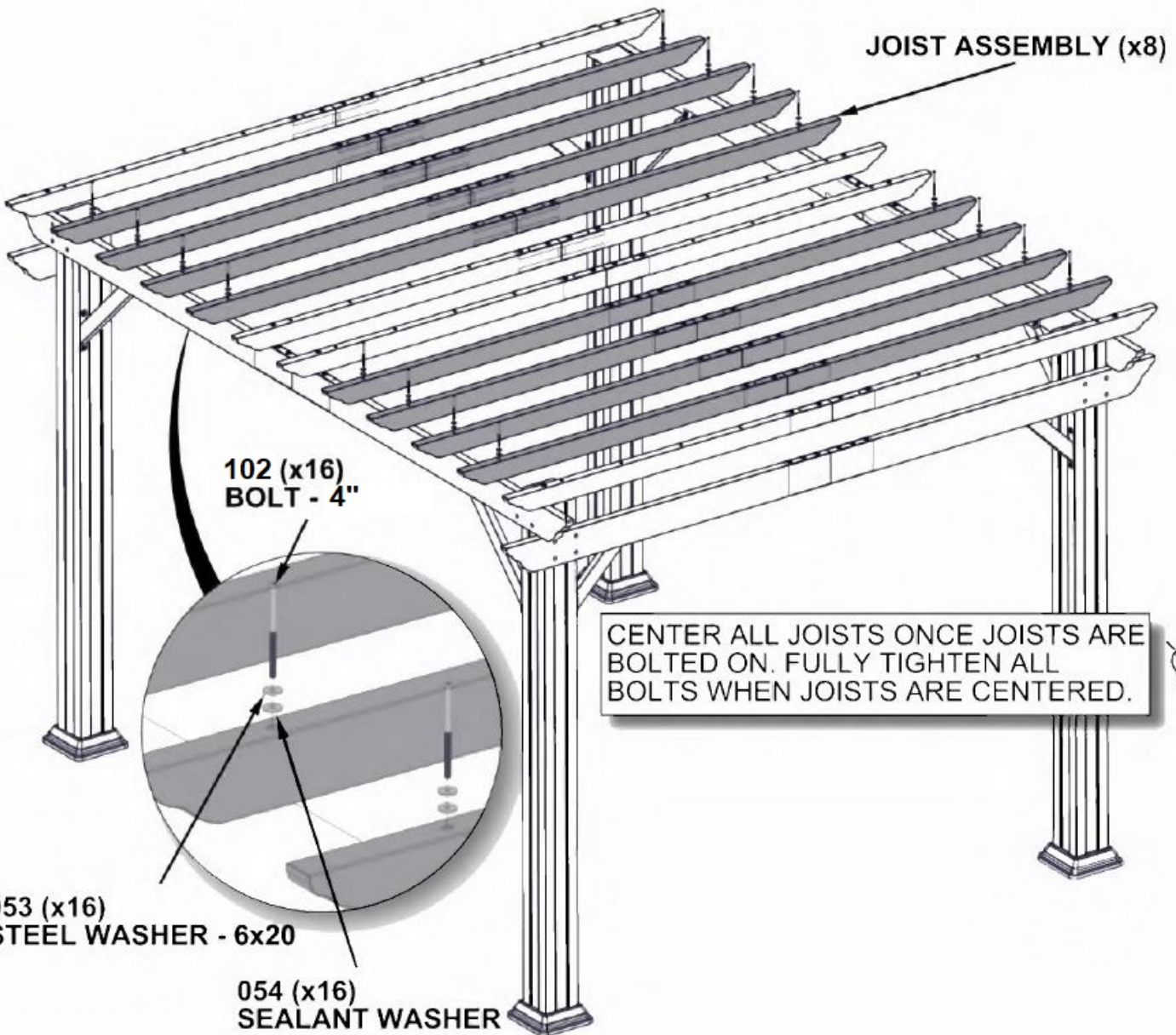
H101053 | STEEL WASHER
(16) | 6x20



H101054 | SEALANT WASHER
(16)

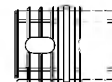


BOLT ONE SIDE OF JOISTS FIRST THEN BOLT OTHER SIDE. DO NOT FULLY TIGHTEN BOLTS YET.





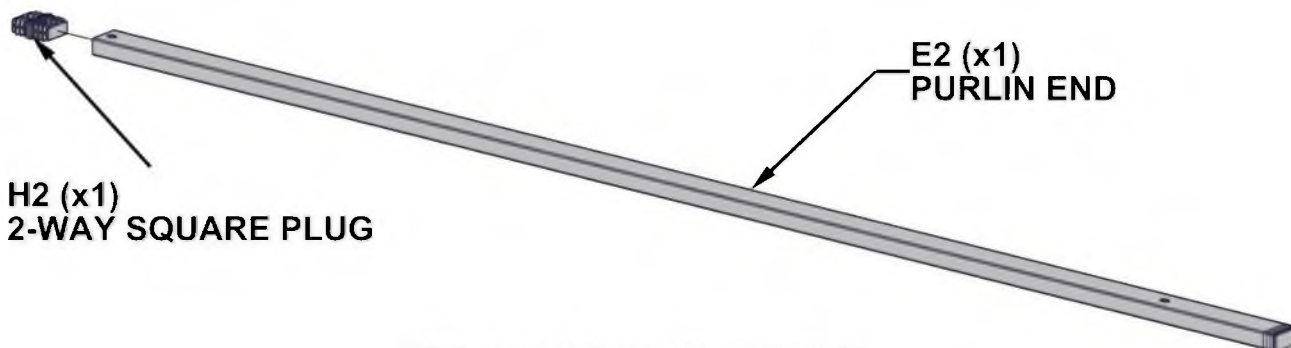
E2 PURLIN END - A4M01290
(10) 3/4"x1 5/8"x66 7/8" (20x40x1698)



H2 2-WAY SQUARE PLUG- A6P00465
(10) 3/4"x1 5/8"x2" (20x40x52)



SLIDE A 2-WAY SQUARE PLUG INTO THE END OF PURLIN.



COMPLETE THIS STEP TEN TIMES.

NOTE: A RUBBER Mallet MAY BE HELPFUL TO GET THE 2-WAY SQUARE PLUG INTO THE END OF THE PURLIN.



(10) PURLIN ASSEMBLY - FROM PREVIOUS STEPS



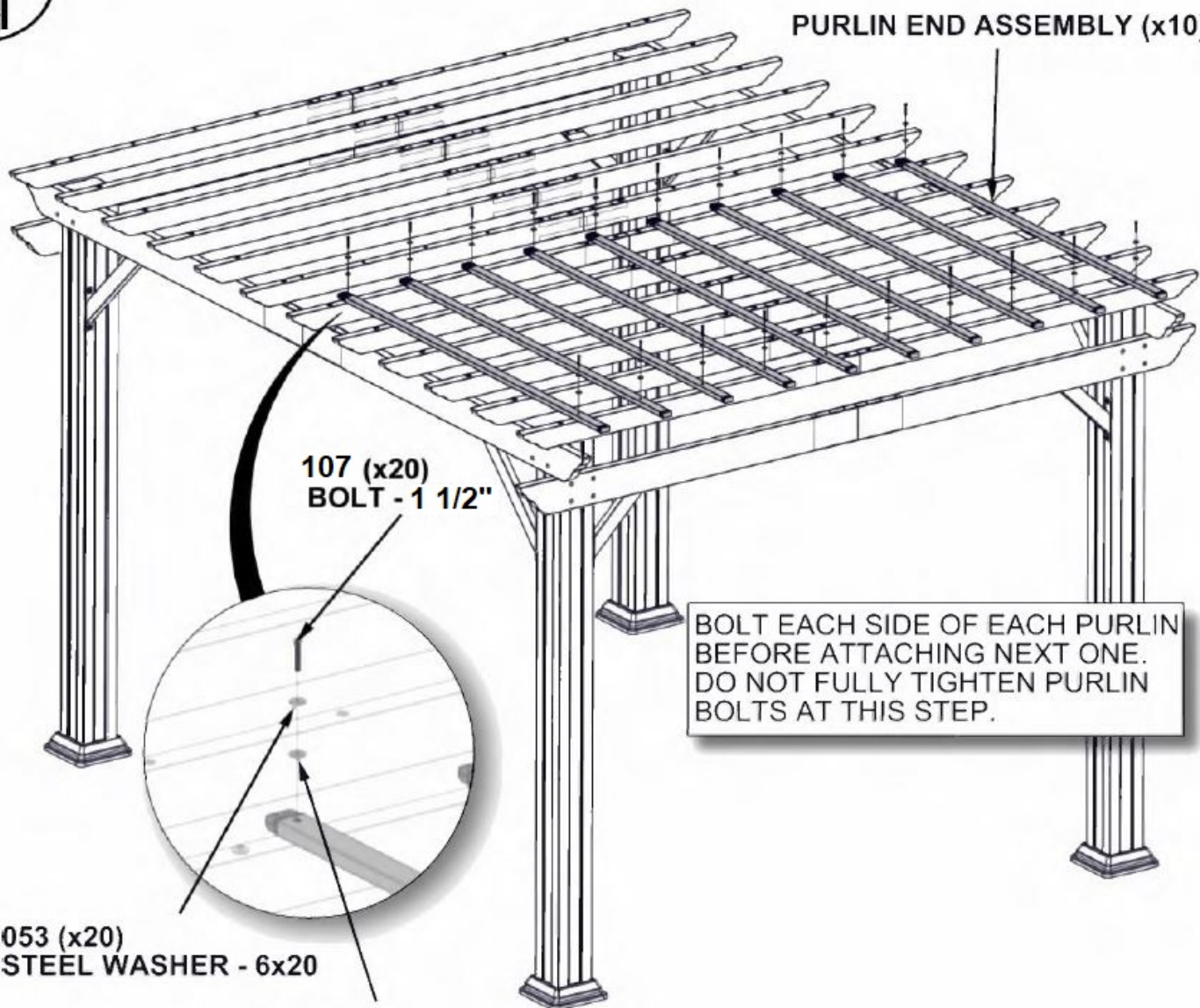
H101107 | TORX PAN HEAD
(20) | 1/4-20x1 1/2"



H101053 | STEEL WASHER
(20) | 6x20



H101054 | SEALANT WASHER
(20)



BOLT EACH SIDE OF EACH PURLIN BEFORE ATTACHING NEXT ONE. DO NOT FULLY TIGHTEN PURLIN BOLTS AT THIS STEP.



E1 PURLIN END - A4M01289
(10) | 3/4"x1 5/8"x77 5/8" (20x40x1972)



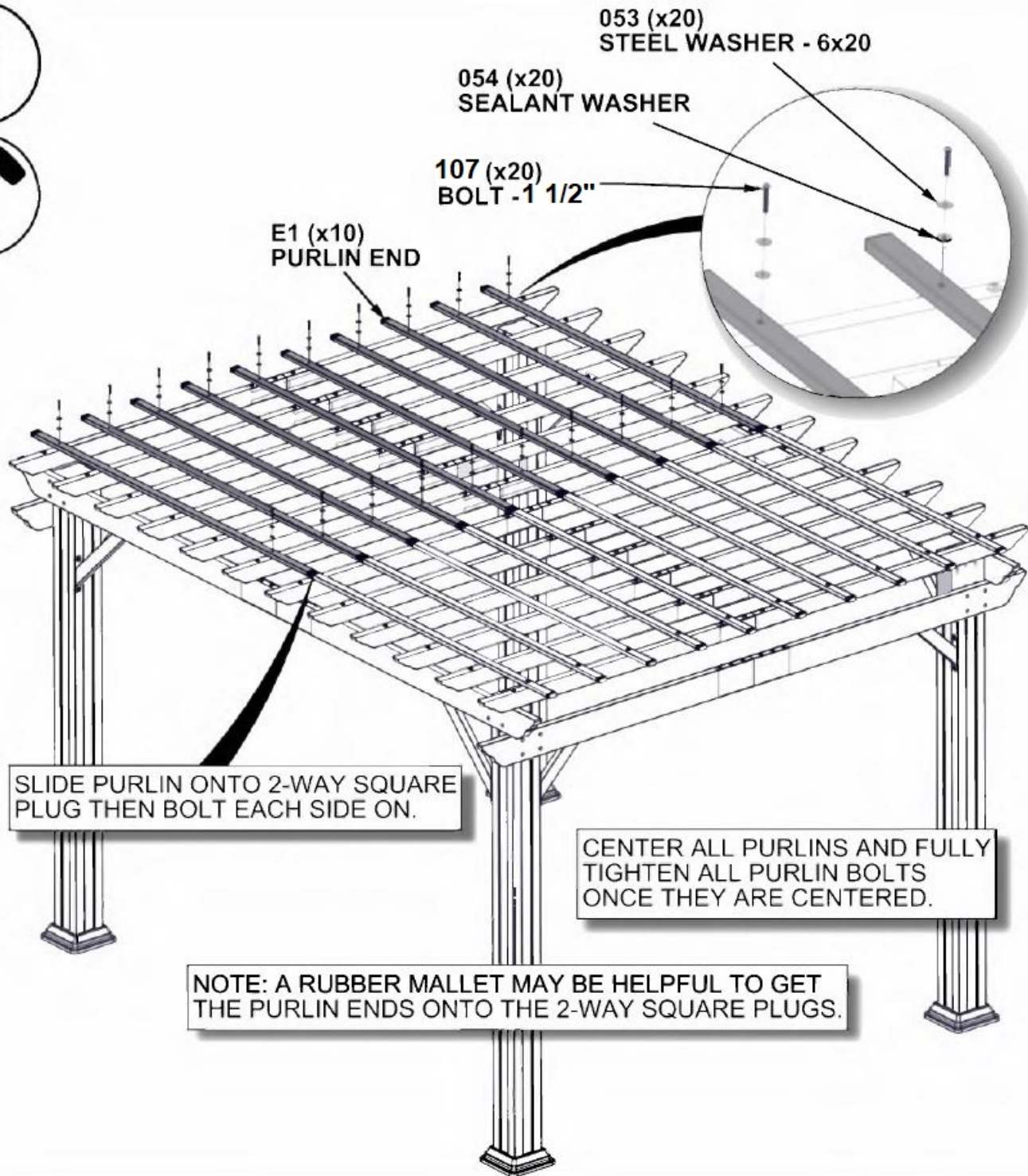
H101107 TORX PAN HEAD
(20) | 1/4-20X1 1/2"



H101053 STEEL WASHER
(20) | 6x20

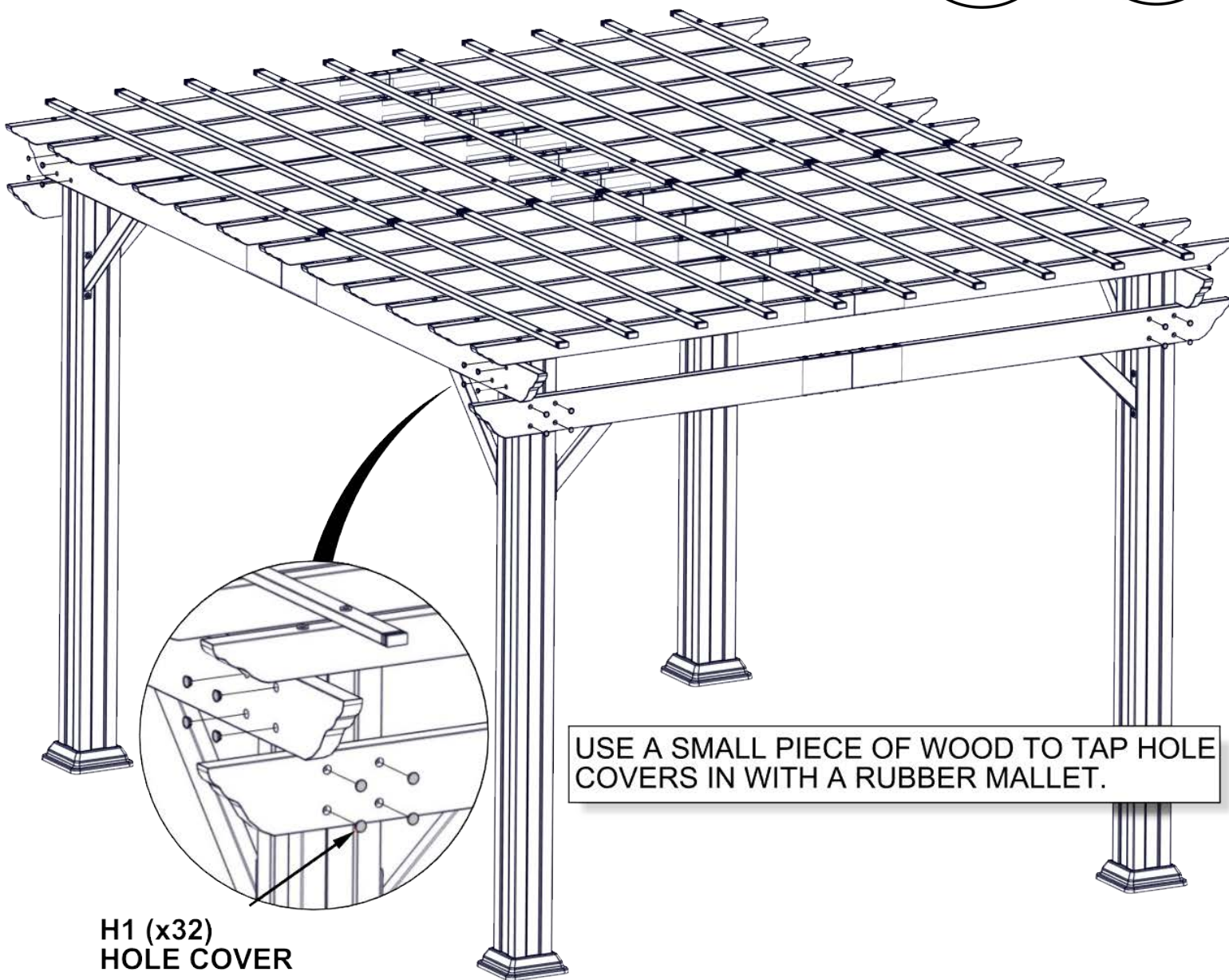
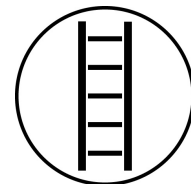
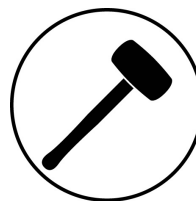


H101054 SEALANT WASHER
(20)





H1 | HOLE COVER-A4M01352
(32)



USE A SMALL PIECE OF WOOD TO TAP HOLE COVERS IN WITH A RUBBER MALLET.

H1 (x32)
HOLE COVER



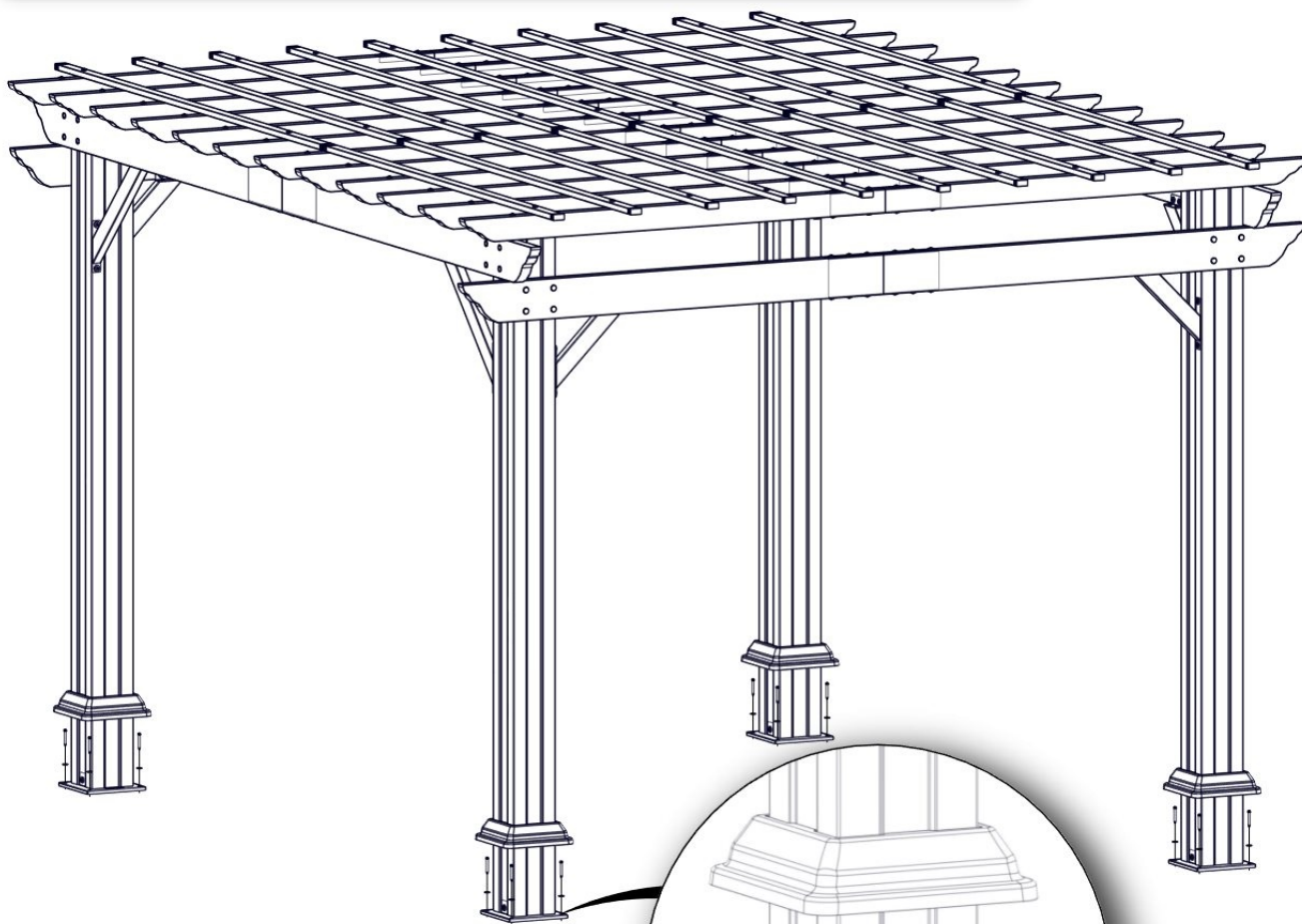
H100120 | SCREW CONCRETE ANCHOR
(16) | 1/4x2



H100630 | WASHER FLAT BLK
(16) | 8x19

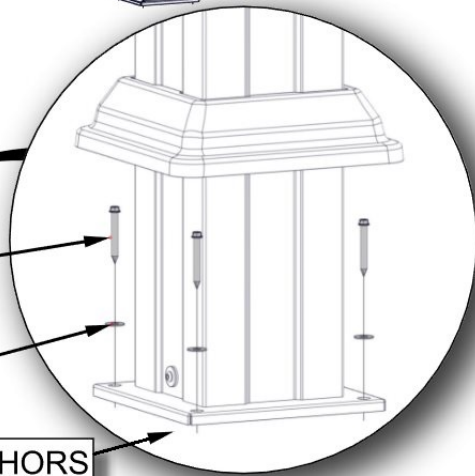
MANUFACTURER RECOMMENDS INSTALLATION ON CONCRETE SURFACE OR CONCRETE POST PAD AS SHOWN BELOW.

FOR INSTALLATION ON WOOD DECK, YOU MUST ENSURE THERE IS AMPLE STRUCTURAL SUPPORT UNDER THE DECK. HARDWARE NOT INCLUDED FOR DECK ATTACHMENT.

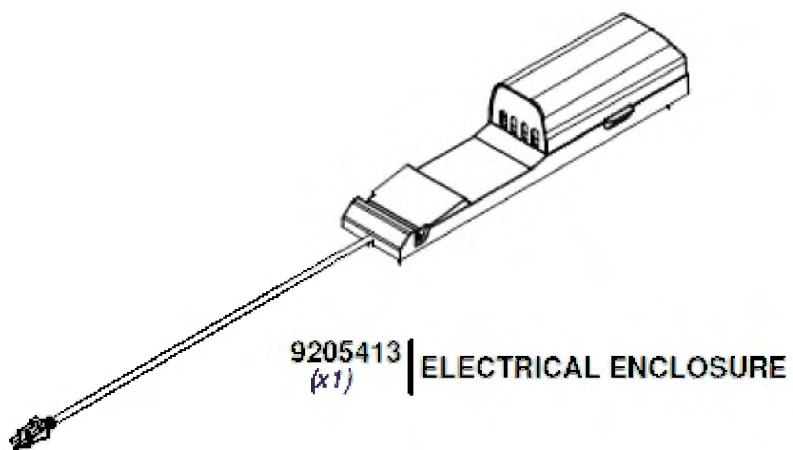


**120 (x16)
SCREW - 2"**

**630 (x16)
WASHER - 8x19**



PRE-DRILL HOLES FOR CONCRETE ANCHORS USING A 3/16" CONCRETE DRILL BIT.



FOR ELECTRICAL ENCLOSURE INSTALLATION REFER TO ASSEMBLY INSTRUCTIONS THAT COMES PACKAGED WITH THE ELECTRICAL ENCLOSURE KIT. INSTALL ON ANY POST THAT IS DESIRED. FOLLOW DIRECTIONS FOR PROPER INSTALLATION.



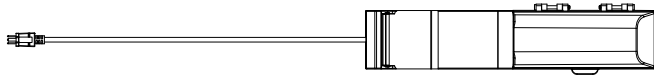
PowerPort™

Model # 9205413
Wood Post Mounting Instructions



PowerPort.

MANUFACTURED BY:
Backyard Discovery
3305 Airport Drive
Pittsburg, KS 66762
800-856-4445

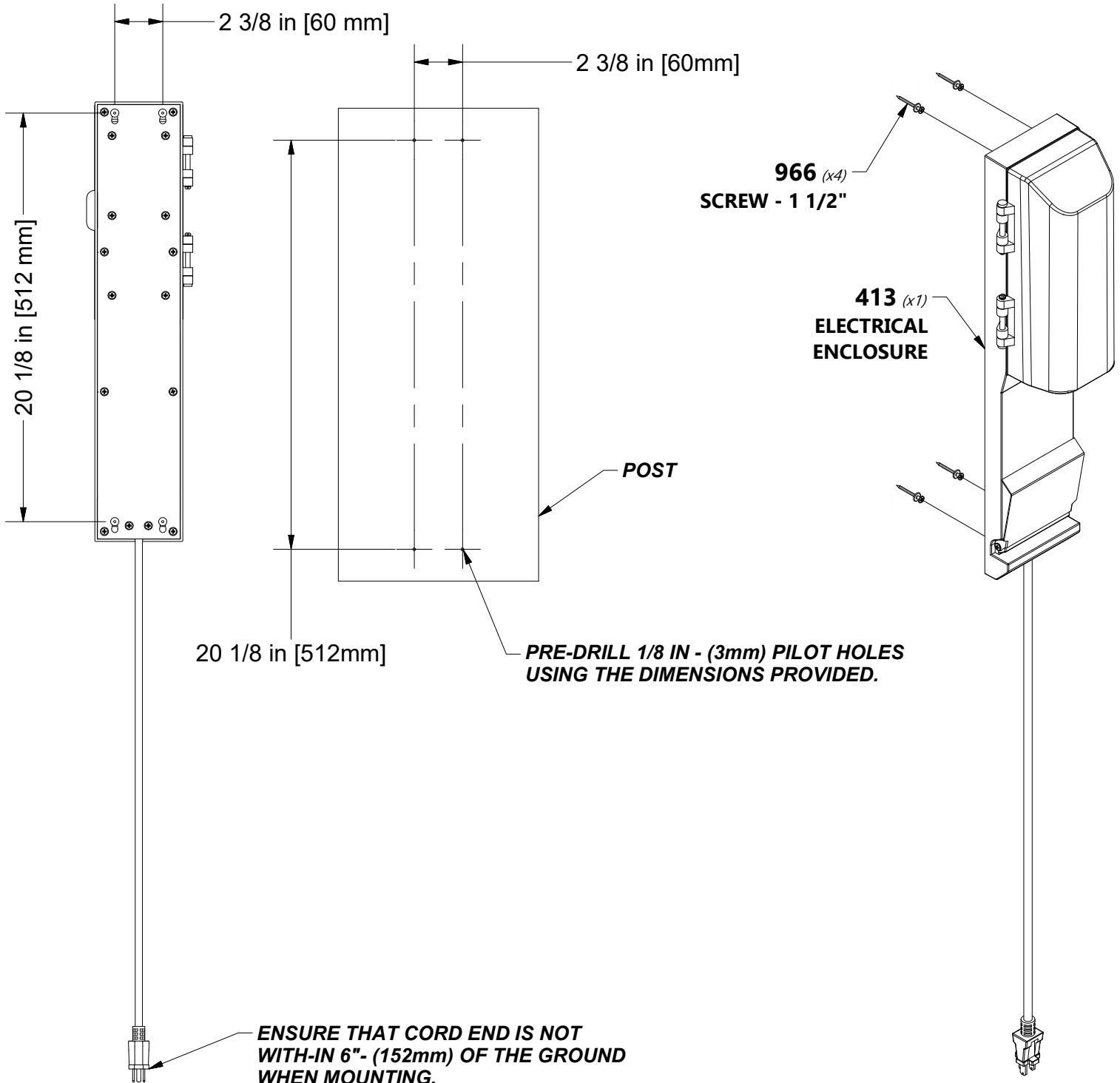


9205413 | ELECTRICAL ENCLOSURE
(x1)



H100966 | SCREW RAISED HEAD
(x4) | 8x1 1/2

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov





PowerPort

Model # 9205413
Metal Post Mounting Instructions



MANUFACTURED BY:
Backyard Discovery
3305 Airport Drive
Pittsburg, KS 66762
800-856-4445



A4M01292 | MOUNTING BRACKET
(x2)

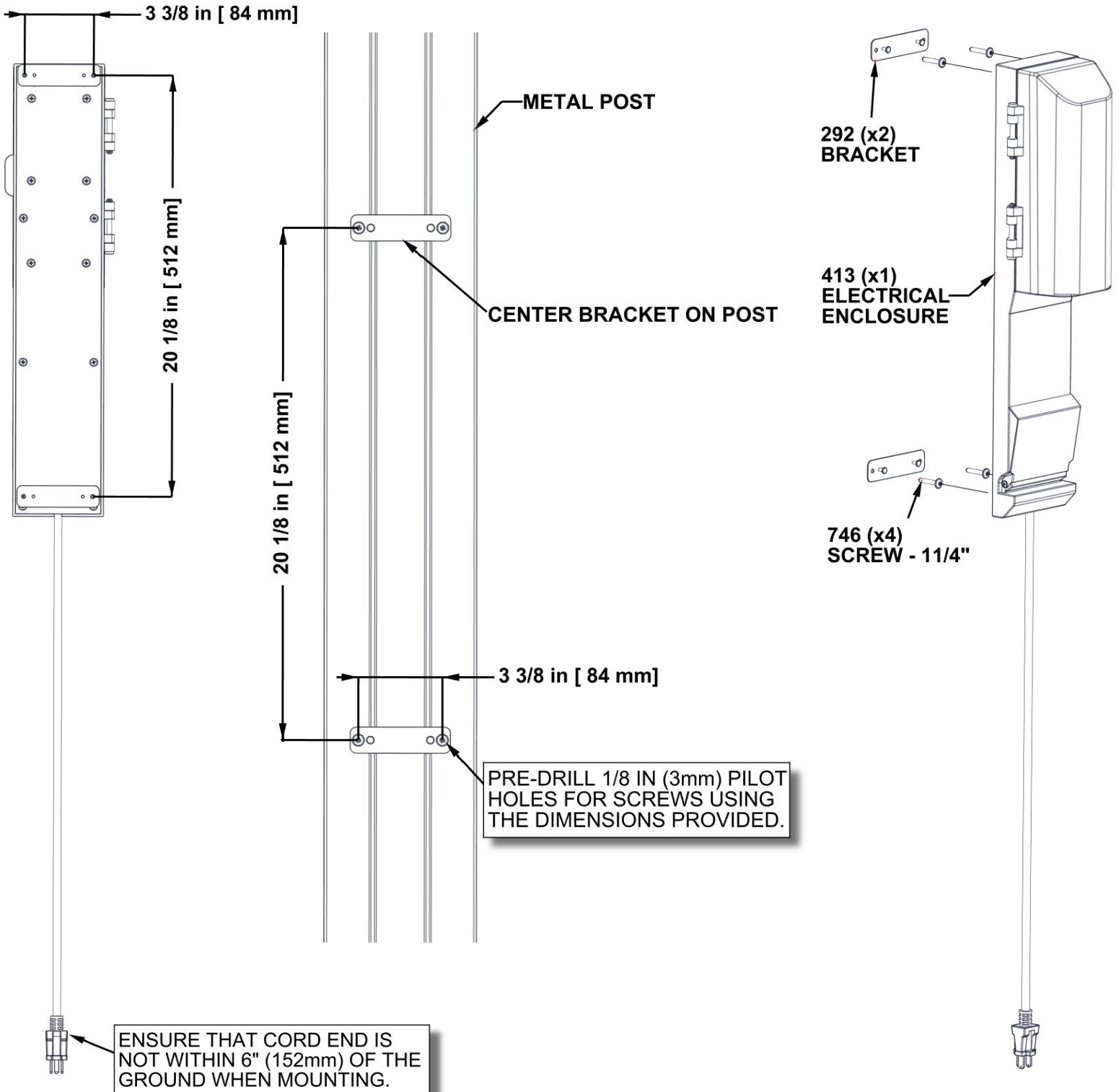


9205413 | ELECTRICAL ENCLOSURE
(x1)



H100746 | SCREW TAPPING
(x4) 10x1 1/4"

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov



FCC MARKING:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC INSTRUCTIONS:

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.