



**MANUFACTURED BY:**  
**Backyard Discovery**  
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 800-856-4445

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 J.P. Coenstraat 7, The Bridge, The Hague, 2595 WP, Netherlands Phone: 08005678990

# SOMERVILLE 10x14

Pergola

Model # 2006546B



**Please visit [www.backyarddiscovery.com](http://www.backyarddiscovery.com)**

For the most up to date assembly manual, to register your set, or to order replacement parts  
*Para obtener instrucciones en español, visite [www.backyarddiscovery.com](http://www.backyarddiscovery.com)*



**EASY STEP-BY-STEP  
 3D INTERACTIVE INSTRUCTIONS**

DOWNLOAD THE FREE APP  
 Download on the App Store  
 Get it on Google play



**INSTALLATION  
 SERVICES  
 AVAILABLE!**  
 See inside for details



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

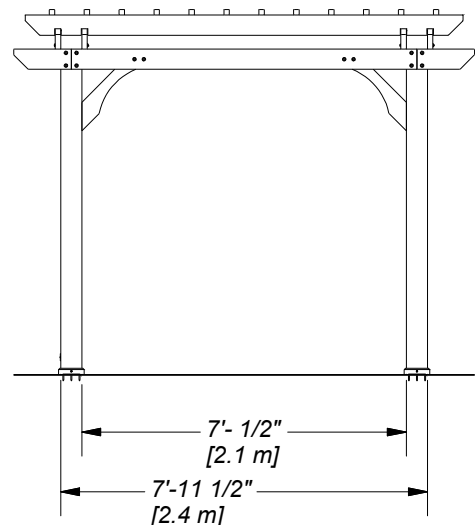
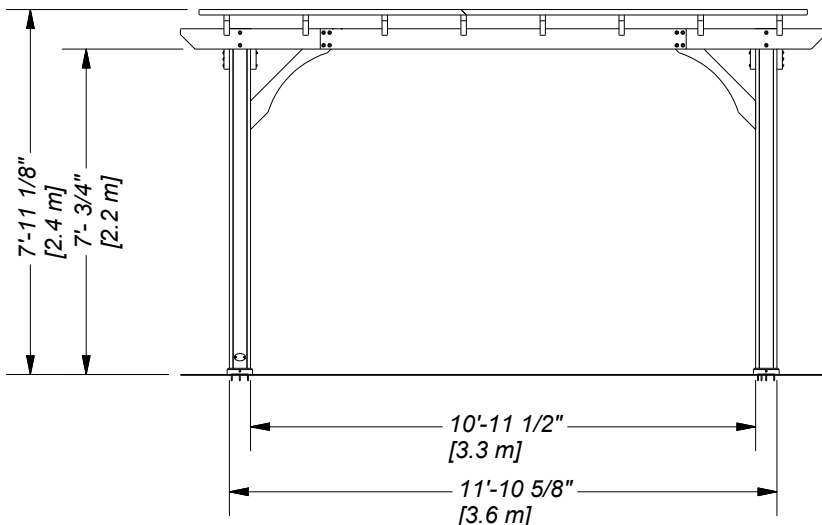
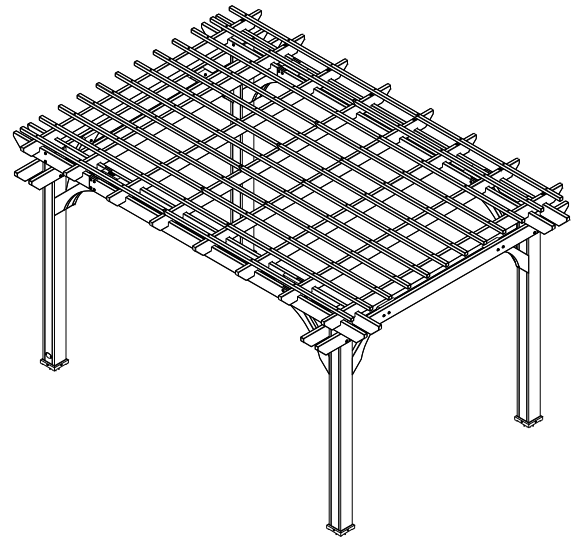
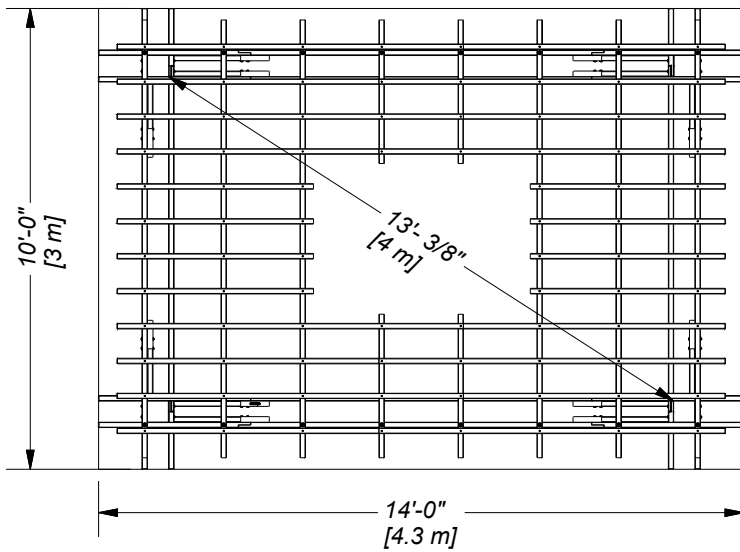
- Pay close attention to the items needed for each step. Make sure you are using the correct hardware for each step. Using incorrect hardware may result in improper assembly.
- Remember to double check for underground utilities and overhead electrical lines.

**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 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.

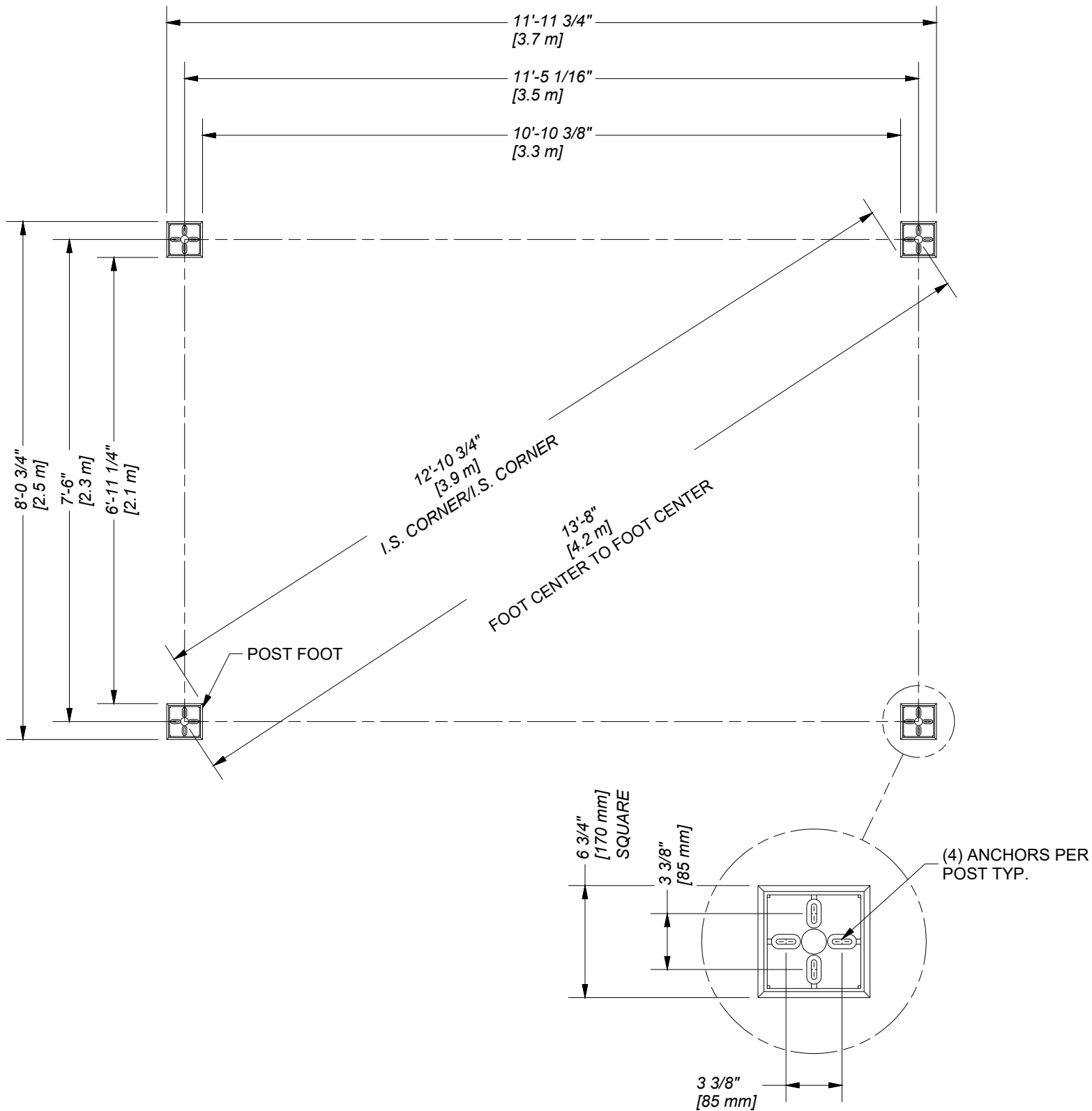
## Ground Dimension

EXAMPLE: 14'-0" (4.3m) x 10'-0" (3m) x 7' 11-1/8" (2.4m)





# ANCHORING LAYOUT





## Wood Components (Not to Scale)



**D01 | JOIST - W4L13476**  
(x2) | 1 3/8"x5 1/4"x95 1/4" (36x134x2420)



**D02 | JOIST - W4L13485**  
(x2) | 1 3/8"x5 1/4"x95 1/4" (36x134x2420)



**D03 | JOIST END - W4L13492**  
(x2) | 1 3/8"x5 1/4"x39 3/4" (36x134x1008)



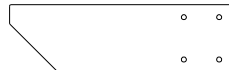
**D04 | JOIST END - W4L13475**  
(x2) | 1 3/8"x5 1/4"x39 3/4" (36x134x1008)



**D05 | JOIST END - W4L13484**  
(x2) | 1 3/8"x5 1/4"x39 3/4" (36x134x1008)



**D06 | JOIST END - W4L13491**  
(x2) | 1 3/8"x5 1/4"x39 3/4" (36x134x1008)



**D07 | JOIST END - W4L13494**  
(x4) | 1 7/16"x5 1/4"x17 3/4" (36x134x451)



**D08 | JOIST - W4L13479**  
(x2) | 1 3/8"x5 1/4"x90" (36x134x2286)



**D09 | JOIST - W4L13477**  
(x2) | 1 3/8"x5 1/4"x90" (36x134x2286)



**D10 | JOIST END - W4L13474**  
(x4) | 1 3/8"x5 1/4"x17 3/4" (36x134x451)



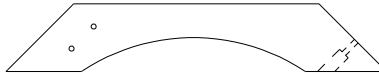
Wood Components (Not to Scale)



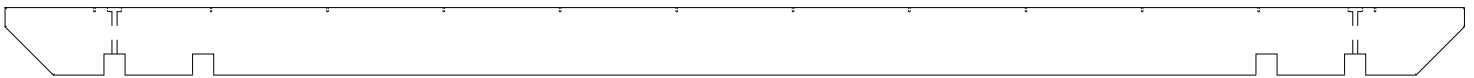
**D11** | LONG ANGLE BRACE - W4L13482  
(x7) | 1 3/8"x5 1/4"x37 1/8" (36x134x942)



**D15** | LONG ANGLE BRACE W/TAG-W2A03347  
(x1) | 1 3/8"x5 1/4"x37 1/8" (36x134x942)



**D12** | SHORT ANGLE BRACE - W4L13483  
(x4) | 1 3/8"x5 1/4"x29 3/4" (36x134x755)



**D13** | SLOTTED JOIST - W4L13478  
(x8) | 1 3/8"x5 1/4"x114" (36x134x2896)



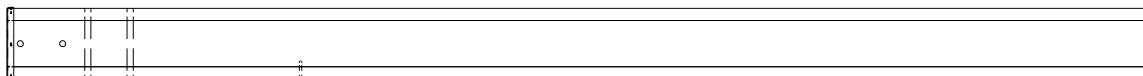
**P01** | PURLIN - W4L13480  
(x12) | 1 3/8"x1 3/8"x69 5/8" (36x36x1768)



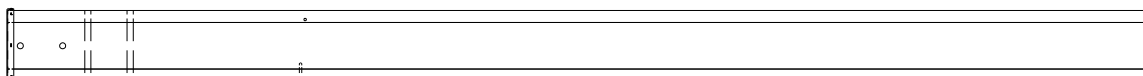
**P02** | PURLIN - W4L13481  
(x12) | 1 3/8"x1 3/8"x90 1/4" (36x36x2291)



Wood Components (Not to Scale)



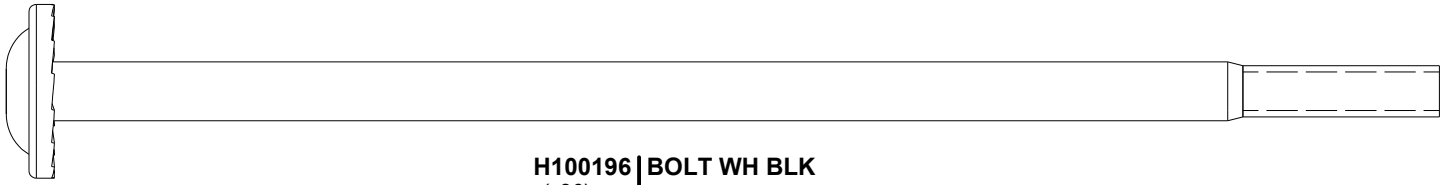
**UP1** | **PERGOLA POST - W2A03006**  
(x2) | 5 1/2"x5 1/2"x89 1/2" (140x140x2273)



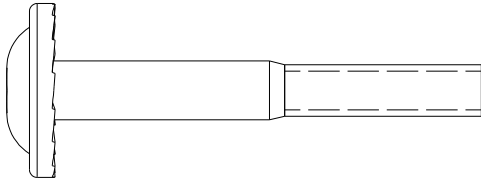
**UP2** | **PERGOLA POST - W2A03008**  
(x2) | 5 1/2"x5 1/2"x89 1/2" (140x140x2273)



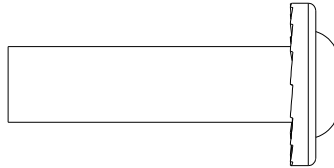
## Hardware Components



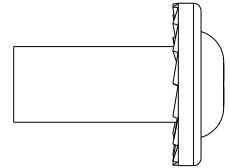
**H100196 | BOLT WH BLK**  
(x26) | 5/16x7-1/4



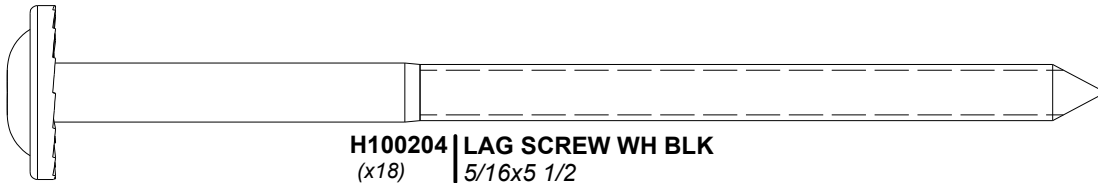
**H100205 | BOLT WH BLK**  
(x42) | 5/16x2-1/4



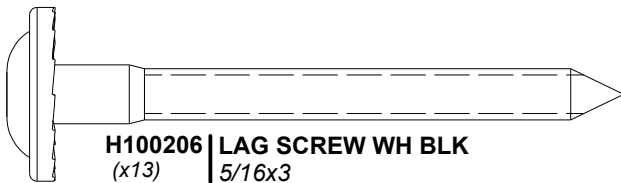
**H100193 | NUT BARREL WH BLK**  
(x26) | 5/16x1-1/2



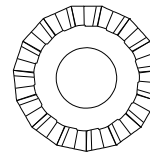
**H100192 | NUT BARREL WH BLK**  
(x42) | 5/16x7/8



**H100204 | LAG SCREW WH BLK**  
(x18) | 5/16x5 1/2



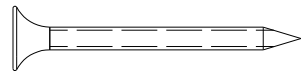
**H100206 | LAG SCREW WH BLK**  
(x13) | 5/16x3



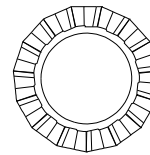
**H100198 | WASHER LOCK EXT BLK**  
(x96) | 8x19



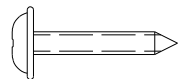
**H100201 | SCREW PFH BLK**  
(x110) | 8x2-1/2



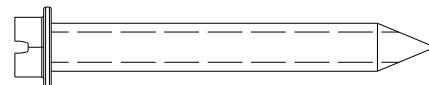
**H100200 | SCREW PFH BLK**  
(x17) | 8x1 1/2



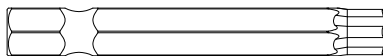
**H100199 | WASHER LOCK EXT BLK**  
(x68) | 12x19



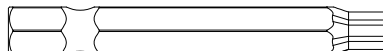
**H100392 | SCREW PWH BLK**  
(x2) | 8x3/4



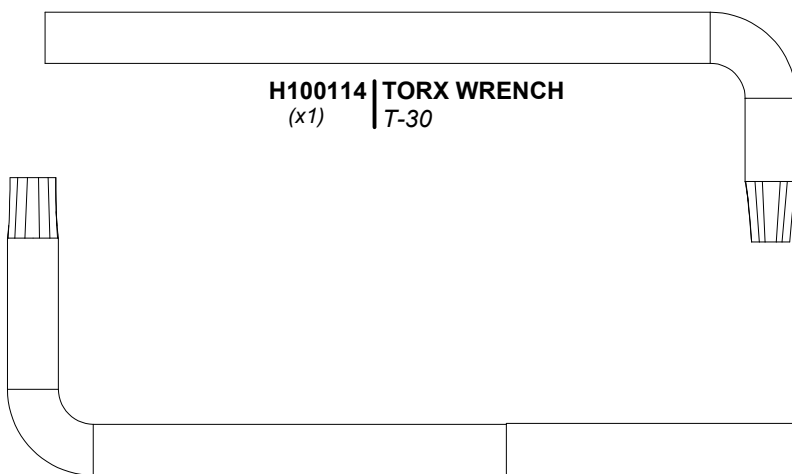
**H100120 | SCREW CONCRETE ANCHOR**  
(x18) | 1/4x2



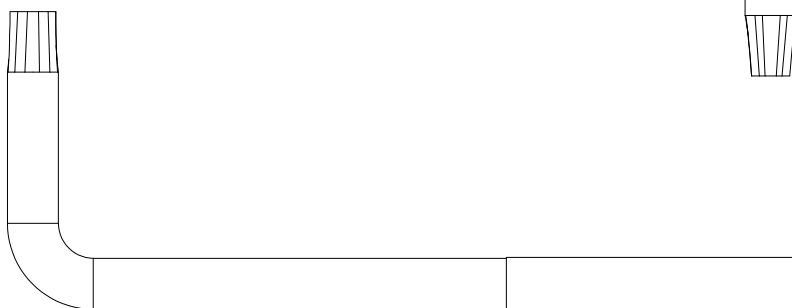
**A100042** | TORX BIT  
(x1) | T-40



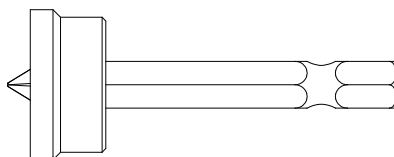
**H100147** | TORX BIT  
(x1) | T-30



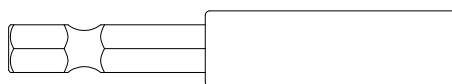
**H100114** | TORX WRENCH  
(x1) | T-30



**A100041** | TORX WRENCH  
(x1) | T-40



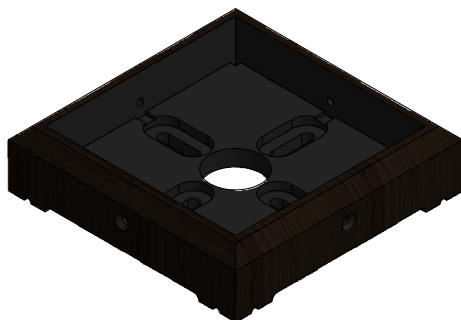
**H100764** | SCREW SETTER  
(x1)



**H101100** | MAGNETIC DRIVER  
(x1)



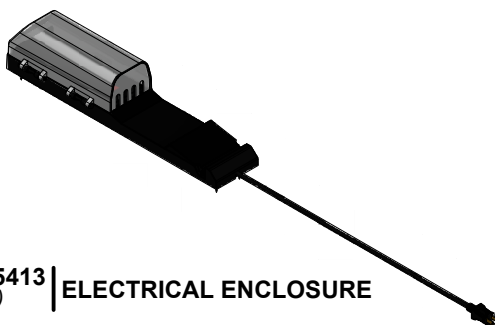
Accessory Components (Not to Scale)



**A100029**  
(x4) | FOOT 142 SQUARE POST



**A100241**  
(x1) | BYD ID TAG (SMALL) WITHOUT AGES



**9205413**  
(x1) | ELECTRICAL ENCLOSURE

# PRE-ASSEMBLY STEP 1 - SORTING PARTS

It is critical for ease of assembly that you take the time to sort and organize the wood and hardware.

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## WOOD PARTS:

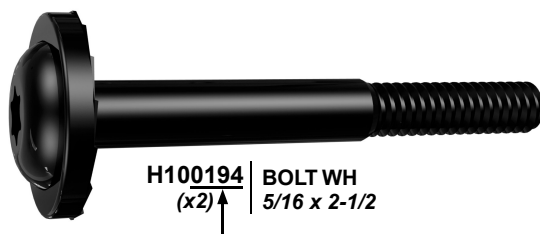
- Organize wood parts by the three-digit, alpha-numeric number stamped on each board (ex. P01).
- If there are multiple boards with the same stamped number, stack those pieces together.
- Stamps can be found on the flat surface of the boards or on the end of the boards.
- Allow yourself plenty of room - the wood pieces can take up a significant amount of space.

**NOTE: CARTONS ARE NOT ORGANIZED BY BOARD NUMBER.**



## HARDWARE PARTS:

- We recommend that you have a separate table to organize the hardware.
- Hardware bags are printed with a seven-digit, alpha-numeric part number.
- You can organize your hardware by part number or group by hardware type (i.e. bolts, nuts, etc.).
- During assembly you only need to reference the last four digits of the number.



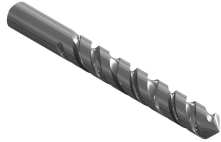
# PRE-ASSEMBLY STEP 2 - TOOLS REQUIRED



Cordless Drill or Electric Drill



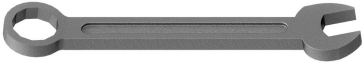
Drill Attachments:  
Phillips Head



1/8", 3/16", 3/8" &  
7/16" Drill Bits



Phillips Screw Driver



Open End  
Wrenches 1/2" &  
7/16"



3/8" Drive Ratchet, 1/2" &  
7/16" STD Sockets, 1/2" &  
7/16" Deep Sockets



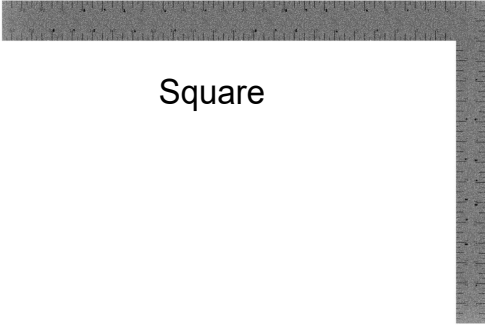
Tape Measure



Claw Hammer



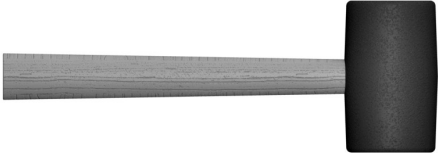
3/8 & 5/16" Nut Drivers



Square



Level 24"



Rubber Mallet -  
Optional

# PRE-ASSEMBLY STEP 3 - 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)



The graphic is a rectangular advertisement for the BILT app. At the top left is the BILT logo, which consists of a stylized hexagonal icon with a dot inside, followed by the word "BILT." in a bold, sans-serif font. To the right of the logo is a large QR code. Below the logo and QR code, the text "Scan for easy 3D instructions" is written in a large, bold, black font. Underneath this, in a smaller font, it says "Download the BILT app before you begin". To the right of this text are two buttons: "Download on the App Store" with the Apple logo and "GET IT ON Google Play" with the Google Play logo. At the bottom of the graphic is a smartphone screen displaying a 3D assembly instruction. The screen shows a grey 3D model of a structure with a horizontal beam and a triangular support. The interface includes a close button (X) in the top right, a menu icon (three dots) below it, a step number "17" in a circle in the bottom left, and navigation arrows (back, play/pause, forward) in the bottom right.



# STEP 1

**D07** | JOIST END - W4L13494  
(x4) | 1 7/16"x5 1/4"x17 3/4" (36x134x451)

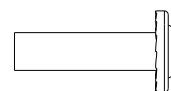
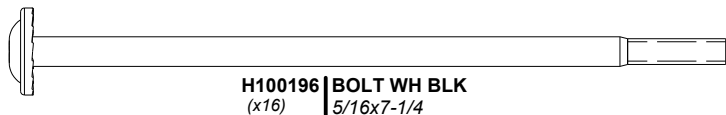
**UP1** | PERGOLA POST - W2A03006  
(x2) | 5 1/2"x5 1/2"x89 1/2" (140x140x2273)

**D09** | JOIST - W4L13477  
(x2) | 1 3/8"x5 1/4"x90" (36x134x2286)

**D10** | JOIST END - W4L13474  
(x4) | 1 3/8"x5 1/4"x17 3/4" (36x134x451)

**UP2** | PERGOLA POST - W2A03008  
(x2) | 5 1/2"x5 1/2"x89 1/2" (140x140x2273)

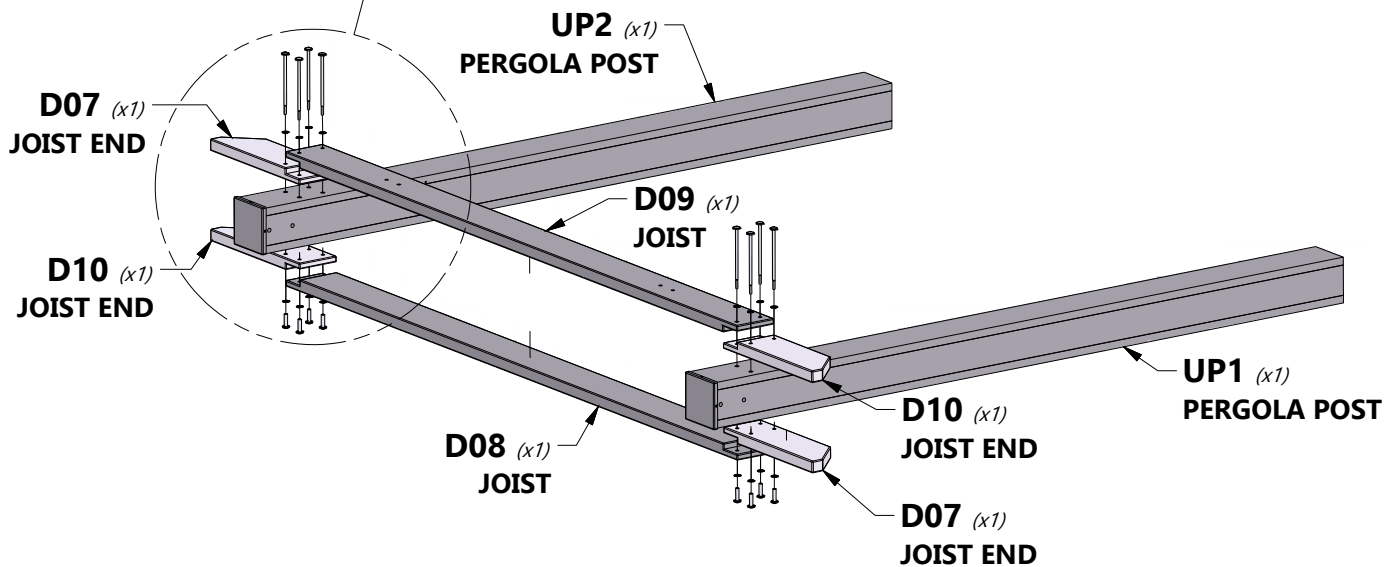
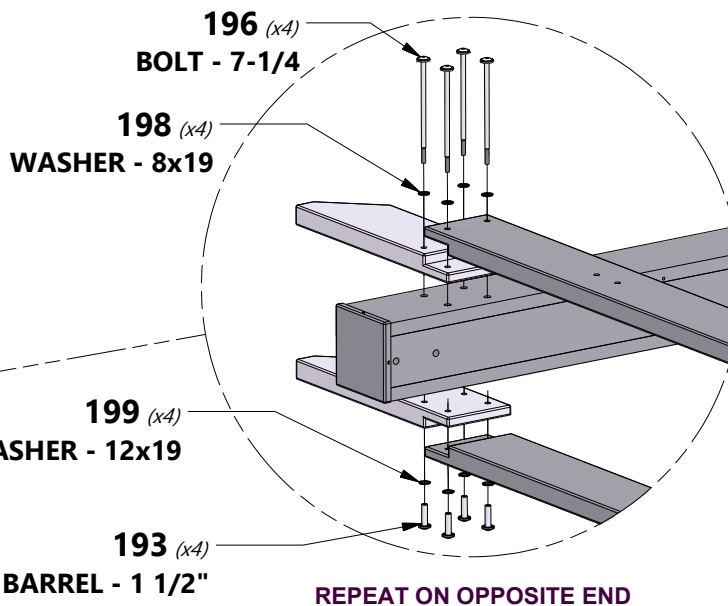
**D08** | JOIST - W4L13479  
(x2) | 1 3/8"x5 1/4"x90" (36x134x2286)

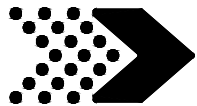


LAY PARTS ON GROUND OR SAW HORSES FOR EASE OF ASSEMBLY.

1. REPEAT THIS STEP TWICE FOR OTHER SIDE.

2. ASSEMBLE AS SHOWN USING THE PRE-DRILLED HOLES IN POSTS.

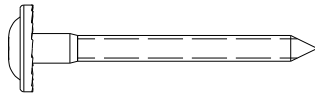




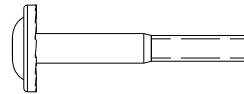
# STEP 2



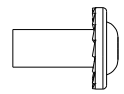
**D12** | SHORT ANGLE BRACE - W4L13483  
(x2) | 1 3/8"x5 1/4"x29 3/4" (36x134x755)



**H100206** | LAG SCREW WH BLK  
(x4) | 5/16x3



**H100205** | BOLT WH BLK  
(x8) | 5/16x2-1/4



**H100192** | NUT BARREL WH BLK  
(x8) | 5/16x7/8



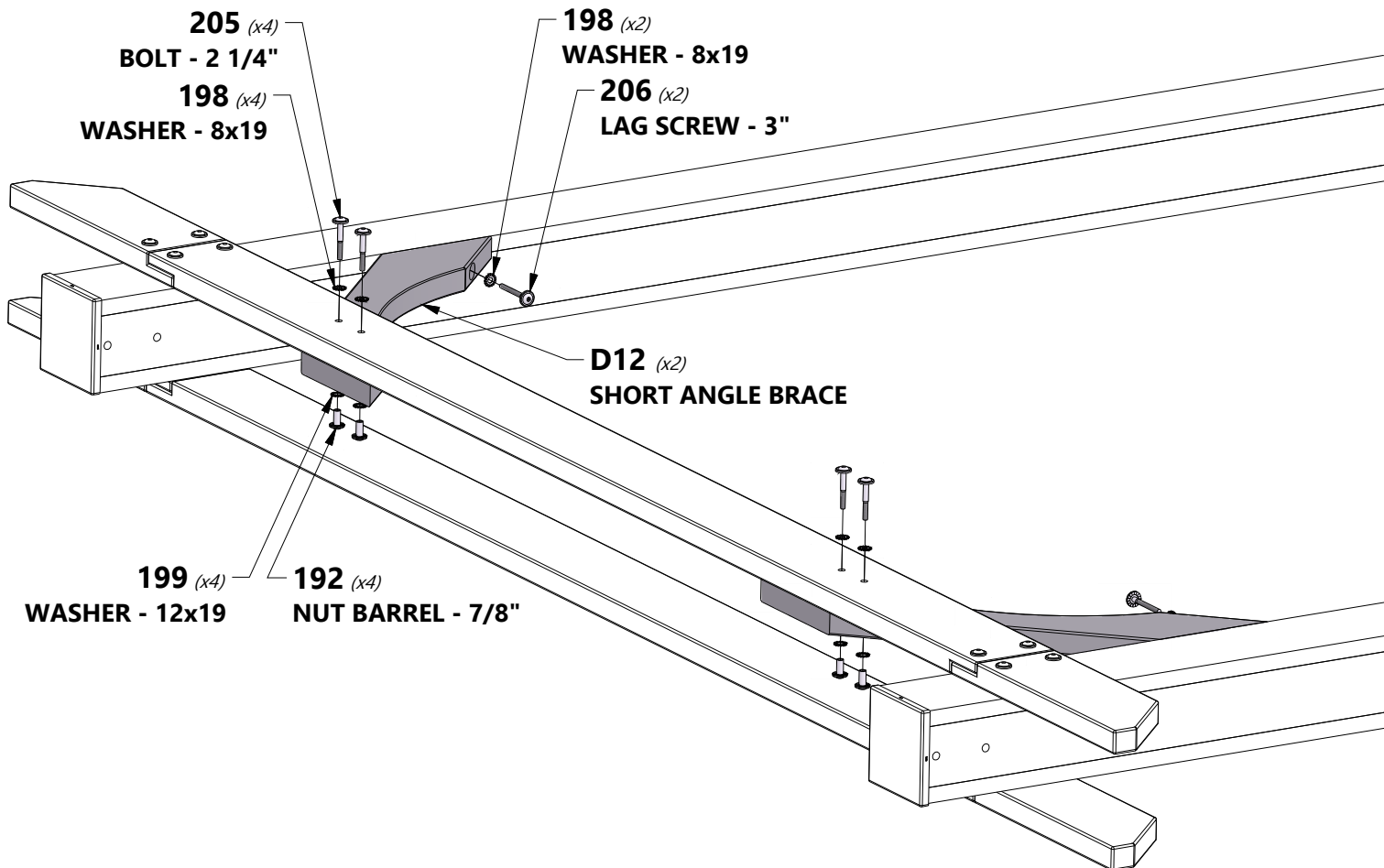
**H100198** | WASHER LOCK EXT BLK  
(x12) | 8x19



**H100199** | WASHER LOCK EXT BLK  
(x8) | 12x19

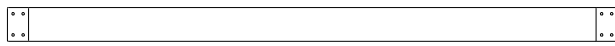
**1. REPEAT THIS STEP TWICE FOR OTHER SIDE.**

**2. ASSEMBLE AS SHOWN USING THE PRE-DRILLED PILOT HOLES IN POSTS.**

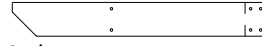




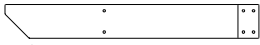
# STEP 3



**D02 | JOIST - W4L13485**  
(x2) | 1 3/8"x5 1/4"x95 1/4" (36x134x2420)



**D05 | JOIST END - W4L13484**  
(x2) | 1 3/8"x5 1/4"x39 3/4" (36x134x1008)



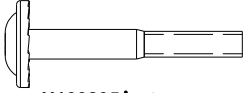
**D03 | JOIST END - W4L13492**  
(x2) | 1 3/8"x5 1/4"x39 3/4" (36x134x1008)



**D11 | LONG ANGLE BRACE - W4L13482**  
(x3) | 1 3/8"x5 1/4"x37 1/8" (36x134x942)



**D15 | LONG ANGLE BRACE W/TAG-W2A03347**  
(x1) | 1 3/8"x5 1/4"x37 1/8" (36x134x942)



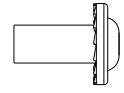
**H100205 | BOLT WH BLK**  
(x16) | 5/16x2-1/4



**H100198 | WASHER LOCK EXT BLK**  
(x16) | 8x19



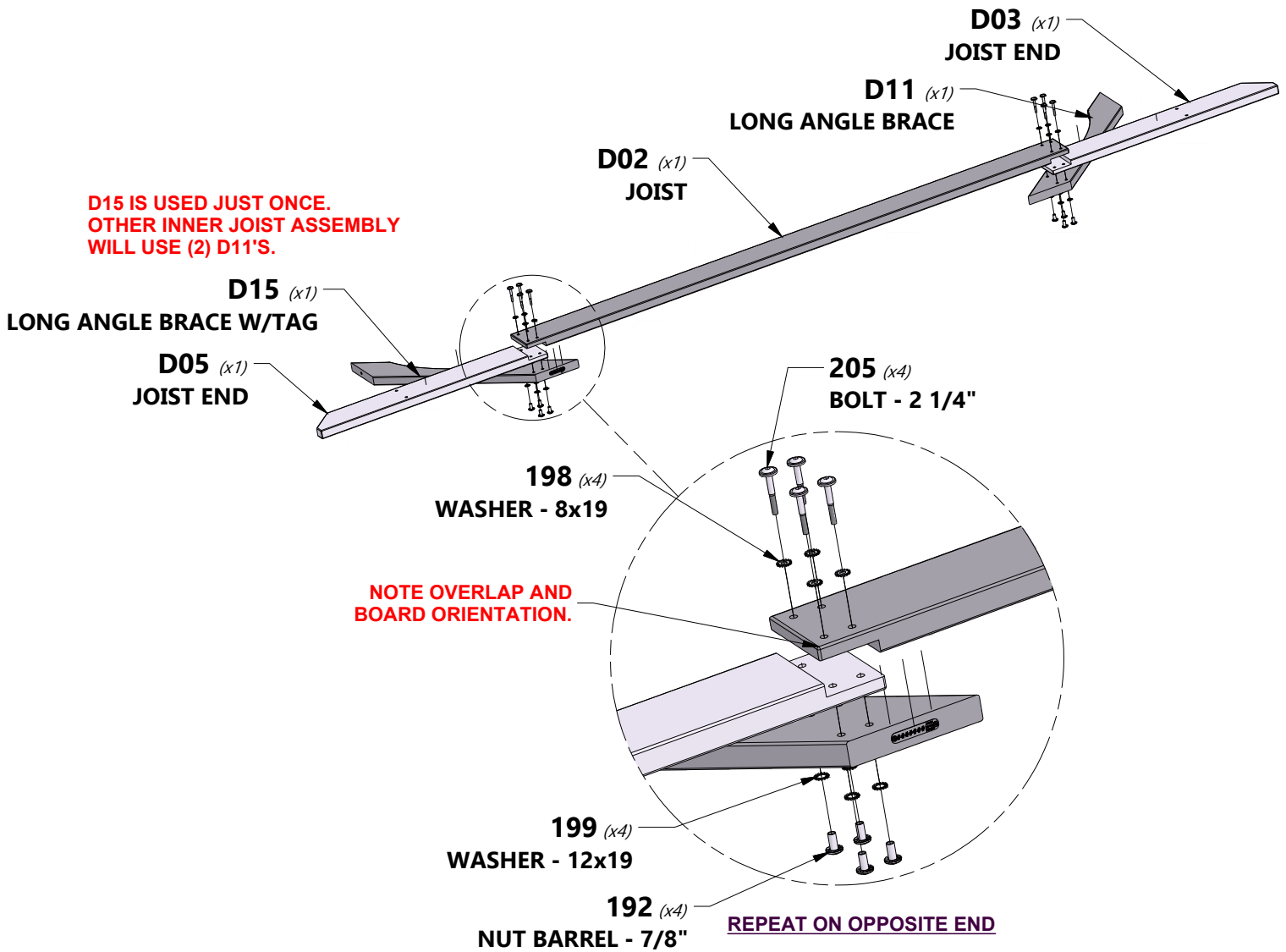
**H100199 | WASHER LOCK EXT BLK**  
(x16) | 12x19



**H100192 | NUT BARREL WH BLK**  
(x16) | 5/16x7/8

**REPEAT STEP TO COMPLETE TWO  
INNER JOIST ASSEMBLIES.**

**D15 IS USED JUST ONCE.  
OTHER INNER JOIST ASSEMBLY  
WILL USE (2) D11'S.**





# STEP 4



**D01 | JOIST - W4L13476**  
(x2) | 1 3/8"x5 1/4"x95 1/4" (36x134x2420)



**D04 | JOIST END - W4L13475**  
(x2) | 1 3/8"x5 1/4"x39 3/4" (36x134x1008)



**D06 | JOIST END - W4L13491**  
(x2) | 1 3/8"x5 1/4"x39 3/4" (36x134x1008)



**D11 | LONG ANGLE BRACE - W4L13482**  
(x4) | 1 3/8"x5 1/4"x37 1/8" (36x134x942)



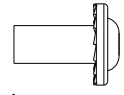
**H100205 | BOLT WH BLK**  
(x16) | 5/16x2-1/4



**H100198 | WASHER LOCK EXT BLK**  
(x16) | 8x19

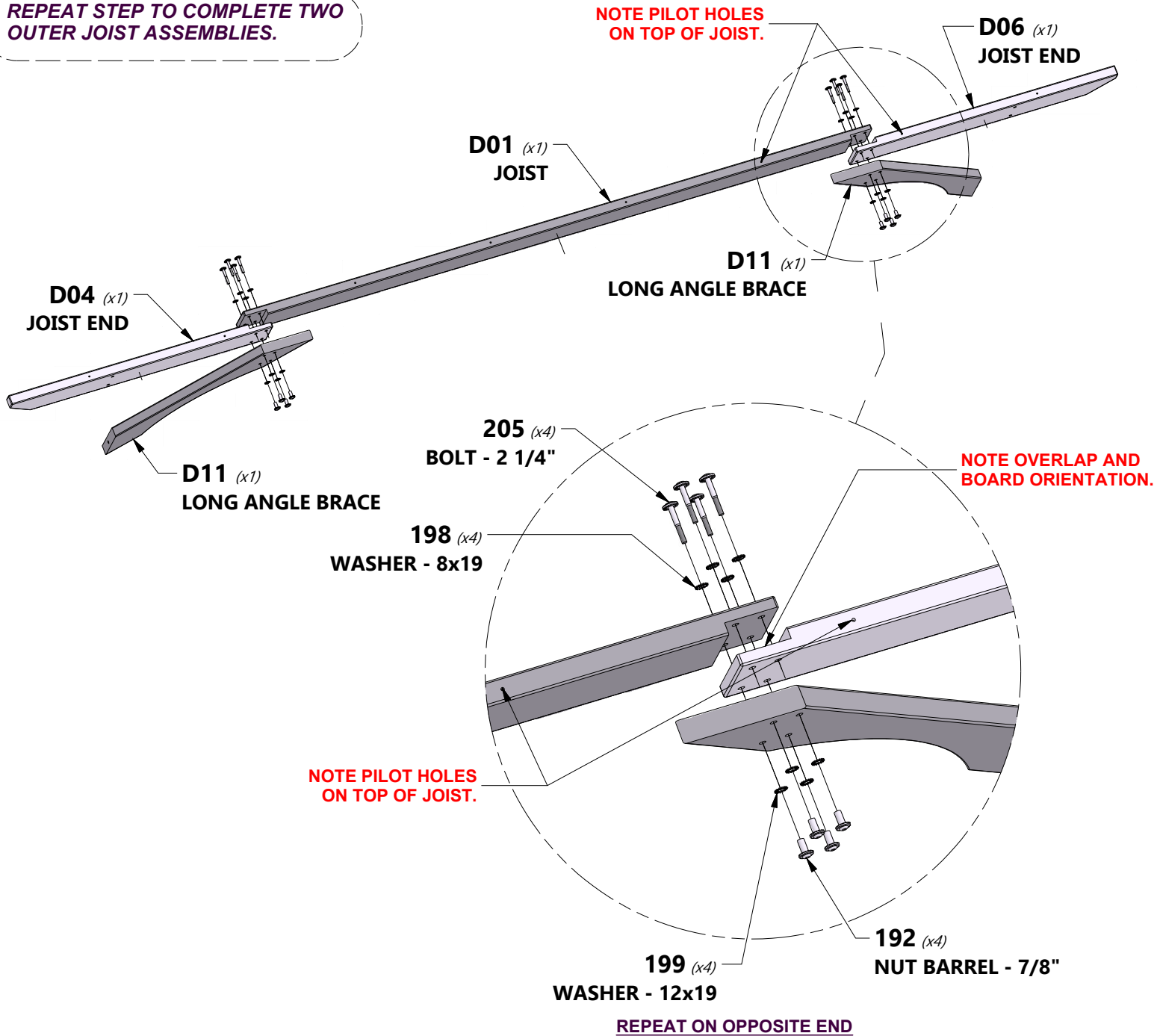


**H100199 | WASHER LOCK EXT BLK**  
(x16) | 12x19



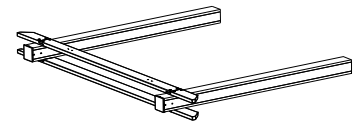
**H100192 | NUT BARREL WH BLK**  
(x16) | 5/16x7/8

**REPEAT STEP TO COMPLETE TWO OUTER JOIST ASSEMBLIES.**

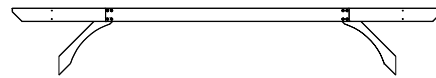




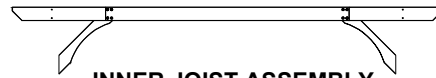
# STEP 5



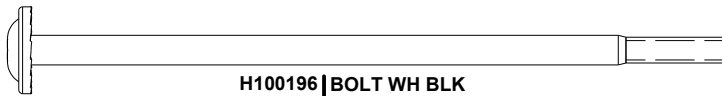
(x2) UPRIGHT ASSEMBLY FROM PREVIOUS STEPS



(x2) OUTER JOIST ASSEMBLY FROM PREVIOUS STEPS



(x2) INNER JOIST ASSEMBLY FROM PREVIOUS STEPS



H100196 | BOLT WH BLK (x8) 5/16x7-1/4



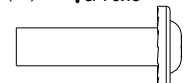
H100206 | LAG SCREW WH BLK (x8) 5/16x3



H100198 | WASHER LOCK EXT BLK (x16) 8x19

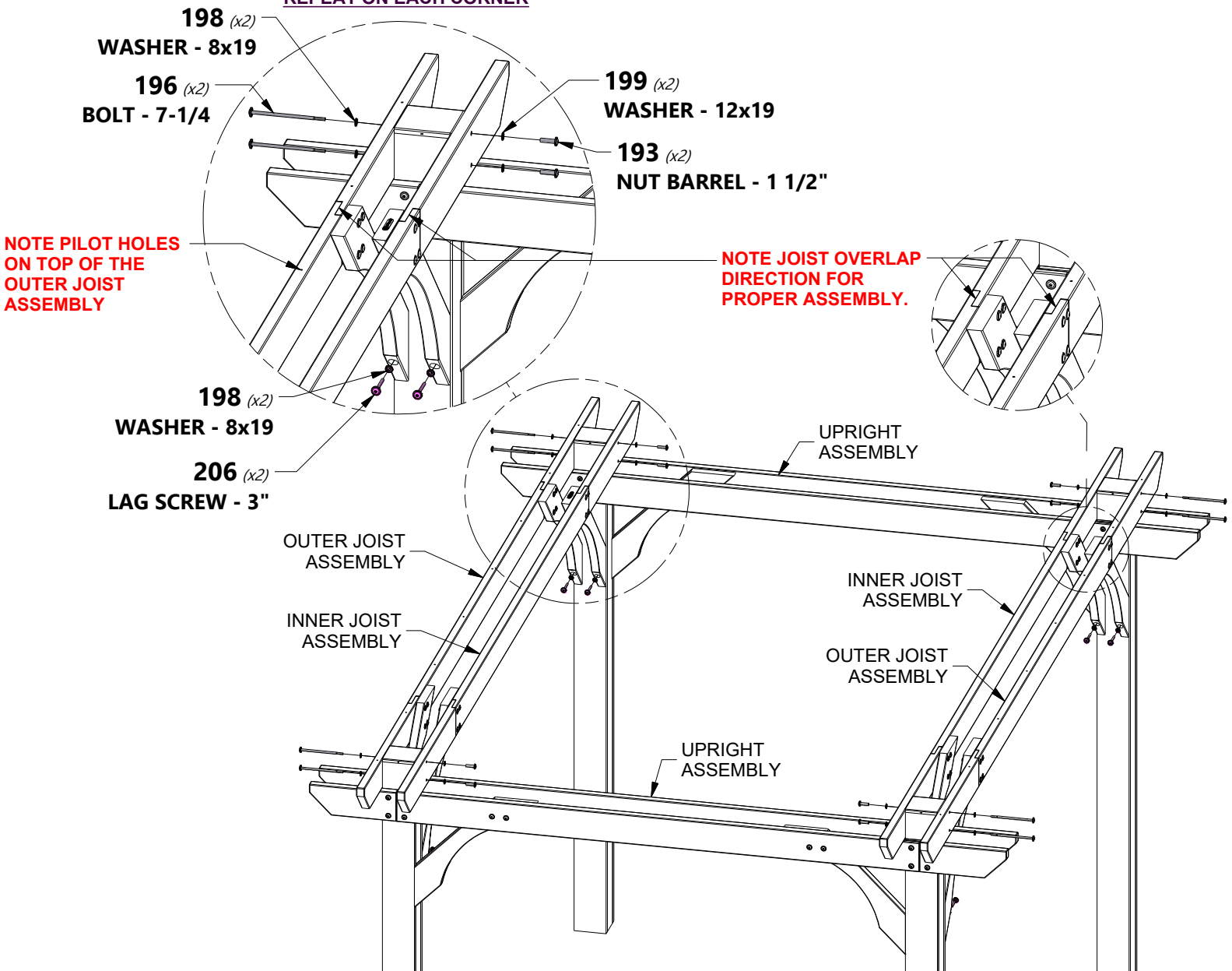


H100199 | WASHER LOCK EXT BLK (x8) 12x19



H100193 | NUT BARREL WH BLK (x8) 5/16x1-1/2

### REPEAT ON EACH CORNER





# STEP 6



**D13** | SLOTTED JOIST - W4L13478  
(x8) | 1 3/8"x5 1/4"x114" (36x134x2896)



**H100204** | LAG SCREW WH BLK  
(x16) | 5/16x5 1/2



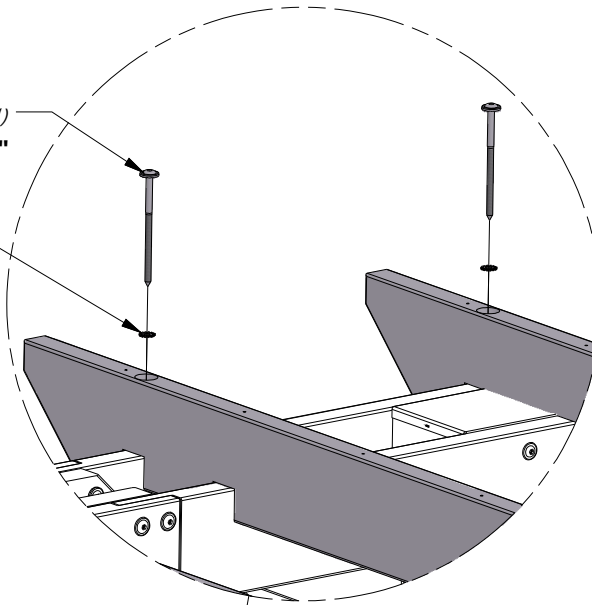
**H100198** | WASHER LOCK EXT BLK  
(x16) | 8x19

**LOCATE AND USE PILOT HOLES IN THE OUTER JOISTS TO MOUNT D13 BOARDS AS SHOWN.**

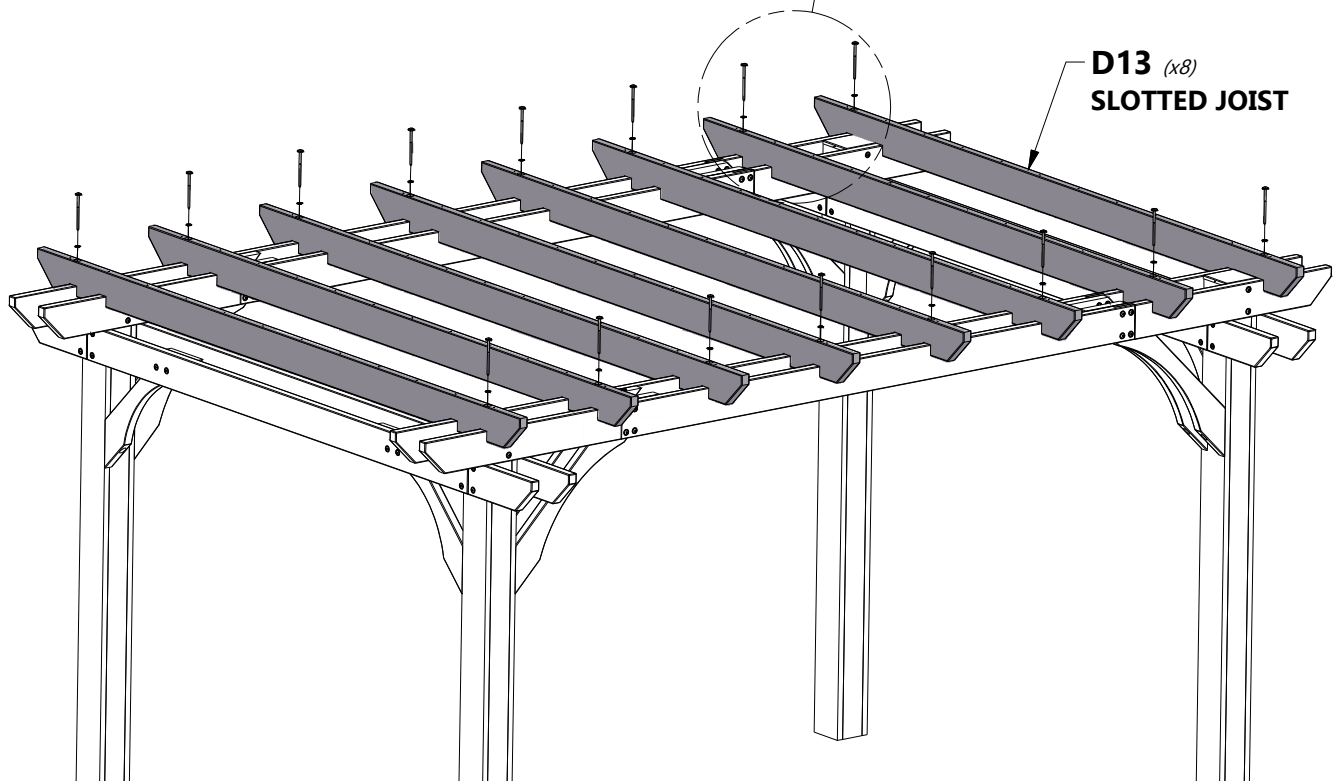
**REPEAT ON OPPOSITE END AND ON ALL JOISTS**

**204** (x1)  
LAG SCREW - 5 1/2"

**198** (x1)  
WASHER - 8x19



**D13** (x8)  
SLOTTED JOIST




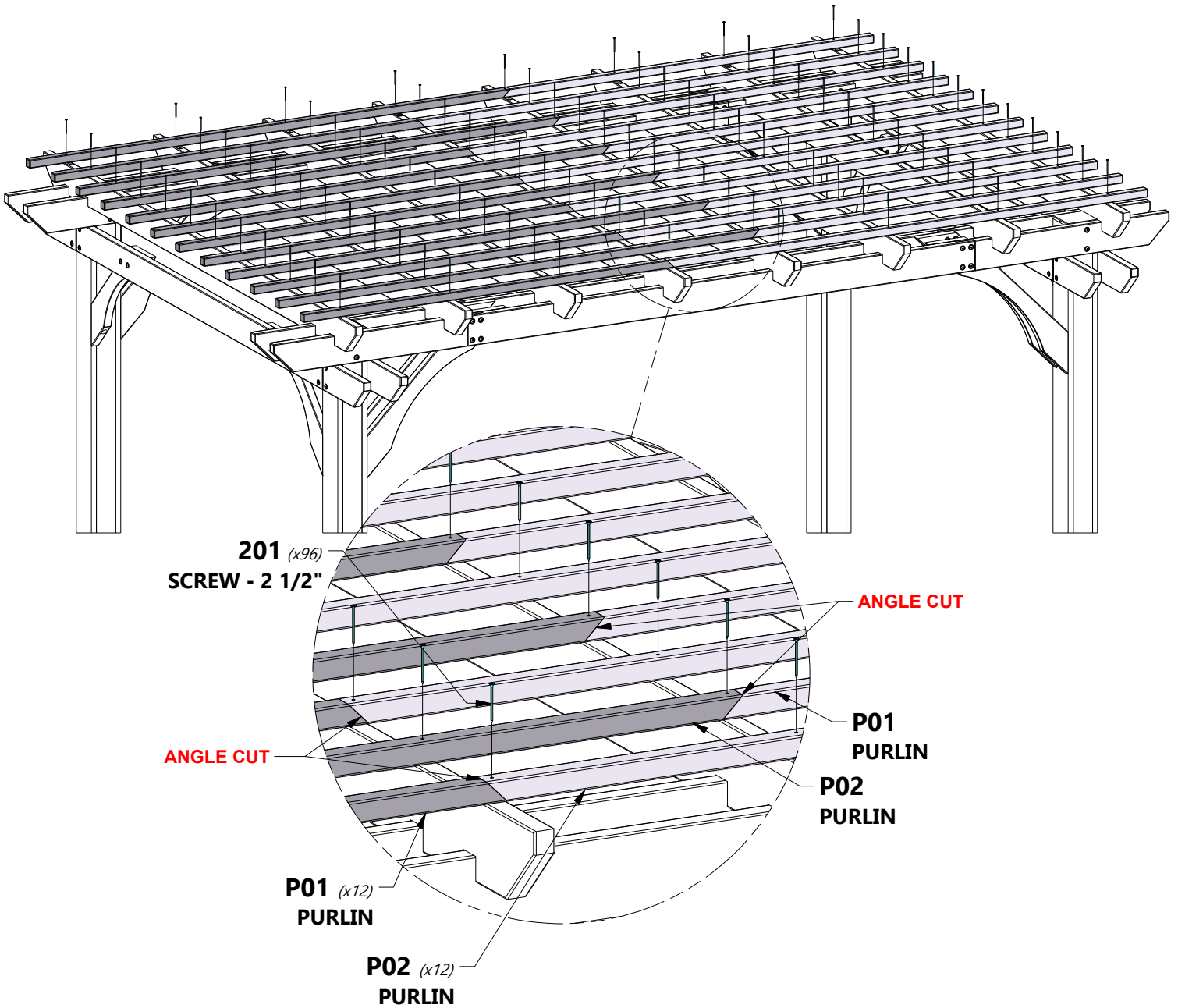


# STEP 7

**P01** | PURLIN - W4L13480  
(x12) | 1 3/8"x1 3/8"x69 5/8" (36x36x1768)

**P02** | PURLIN - W4L13481  
(x12) | 1 3/8"x1 3/8"x90 1/4" (36x36x2291)

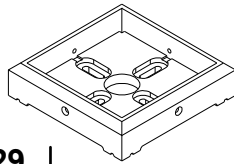
  
**H100201 | SCREW PFH BLK**  
(x96) | 8x2-1/2



**ASSEMBLE P01 & P02 BOARDS BY ALTERNATING THEM AS YOU WORK ACROSS THE JOIST BOARDS. AS SHOWN THE ANGLE CUT IN THE P01 & P02 BOARDS SHOULD ALTERNATE WHICH JOIST THEY LAND ON WHEN ASSEMBLED.**



# STEP 8

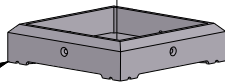
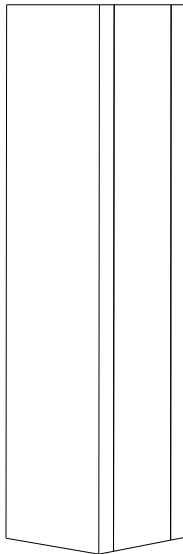


**A100029**  
(x4)

**FOOT 142 SQUARE POST**

**DECIDE WHERE TO PLACE THE PERGOLA. NOTE THIS MOUNTING PROCEDURE IS MEANT TO BE USED ON CONCRETE ONLY.**

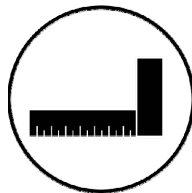
**PLACE THE PERGOLA EXACTLY WHERE IT WILL BE ANCHORED WHEN COMPLETED AND SLIDE A FOOT UNDER EACH POST.**



**029** (x1)

**FOOT 142 SQUARE POST**

**REPEAT ON ALL POSTS**

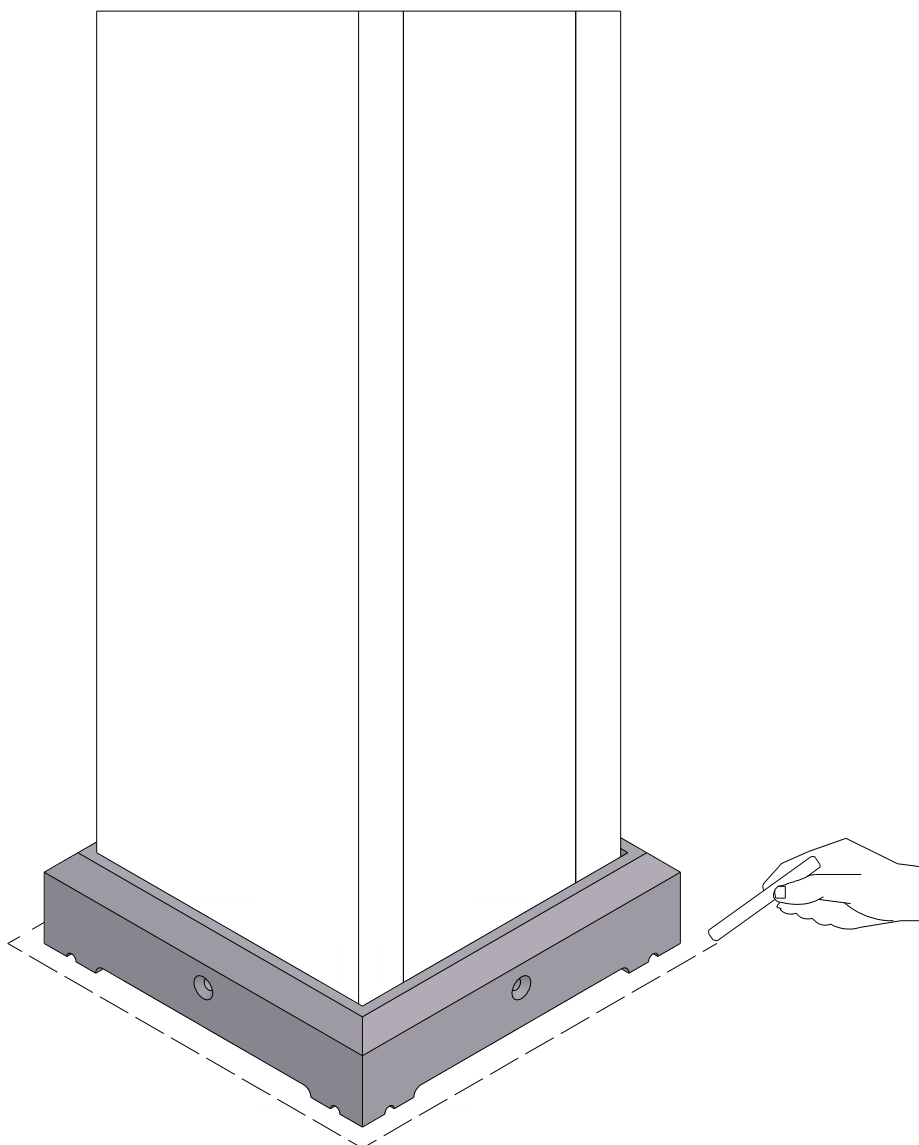


**SQUARE POSTS AND  
TIGHTEN ALL BOLTS AND  
SCREWS AT THIS TIME.**



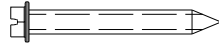
## STEP 9

USE CHALK TO TRACE AROUND THE EDGES OF EACH FOOT TO MARK THE FEET LOCATIONS.





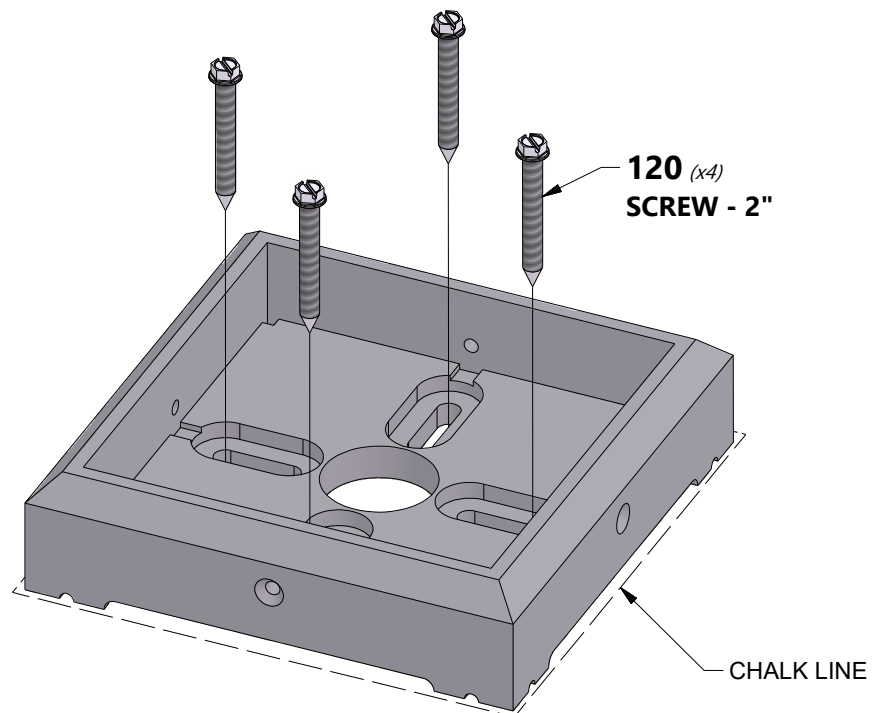
## STEP 10



H100120 | SCREW CONCRETE ANCHOR  
(x16) | 1/4x2

MOVE THE PERGOLA ASIDE AND PLACE EACH FOOT INSIDE THE LINES DRAWN IN THE PREVIOUS STEP. NOW, USE A 3/16" CONCRETE DRILL BIT TO DRILL PILOT HOLES INTO THE CONCRETE PAD.

NEXT, USE THE PROVIDED CONCRETE ANCHORS TO ATTACH EACH FOOT TO THE CONCRETE SURFACE.



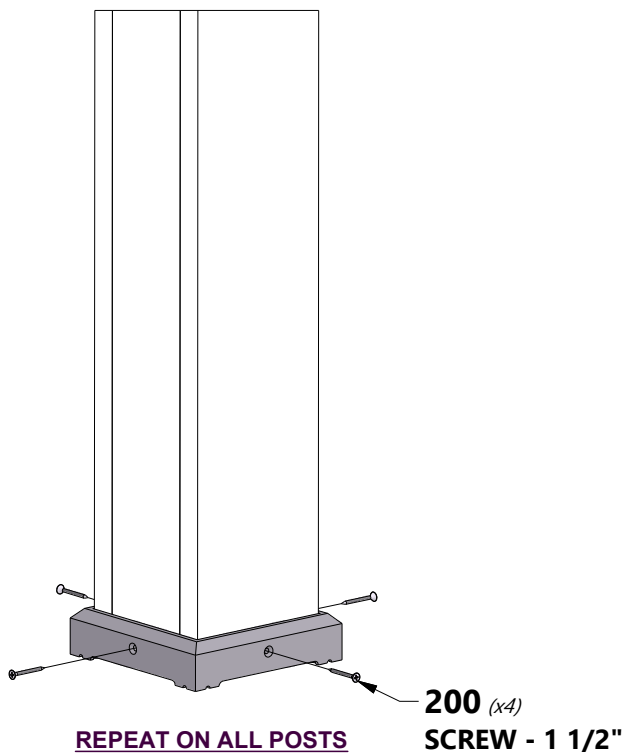


# STEP 11



H100200 | SCREW PFH BLK  
(x16) | 8x1 1/2

MOVE THE PERGOLA BACK INTO PLACE,  
SETTING EACH POST INSIDE A FOOT AND  
MOUNT AS SHOWN USING THE PROVIDED  
HARDWARE.





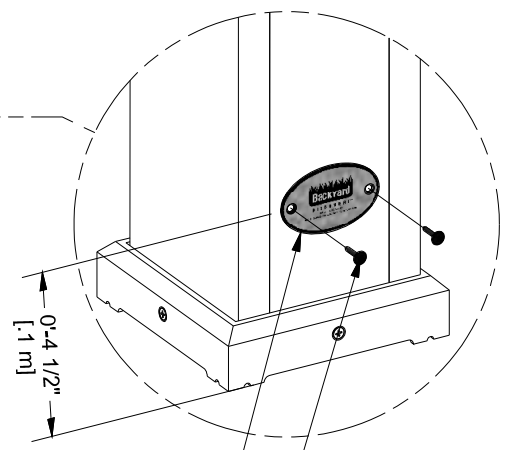
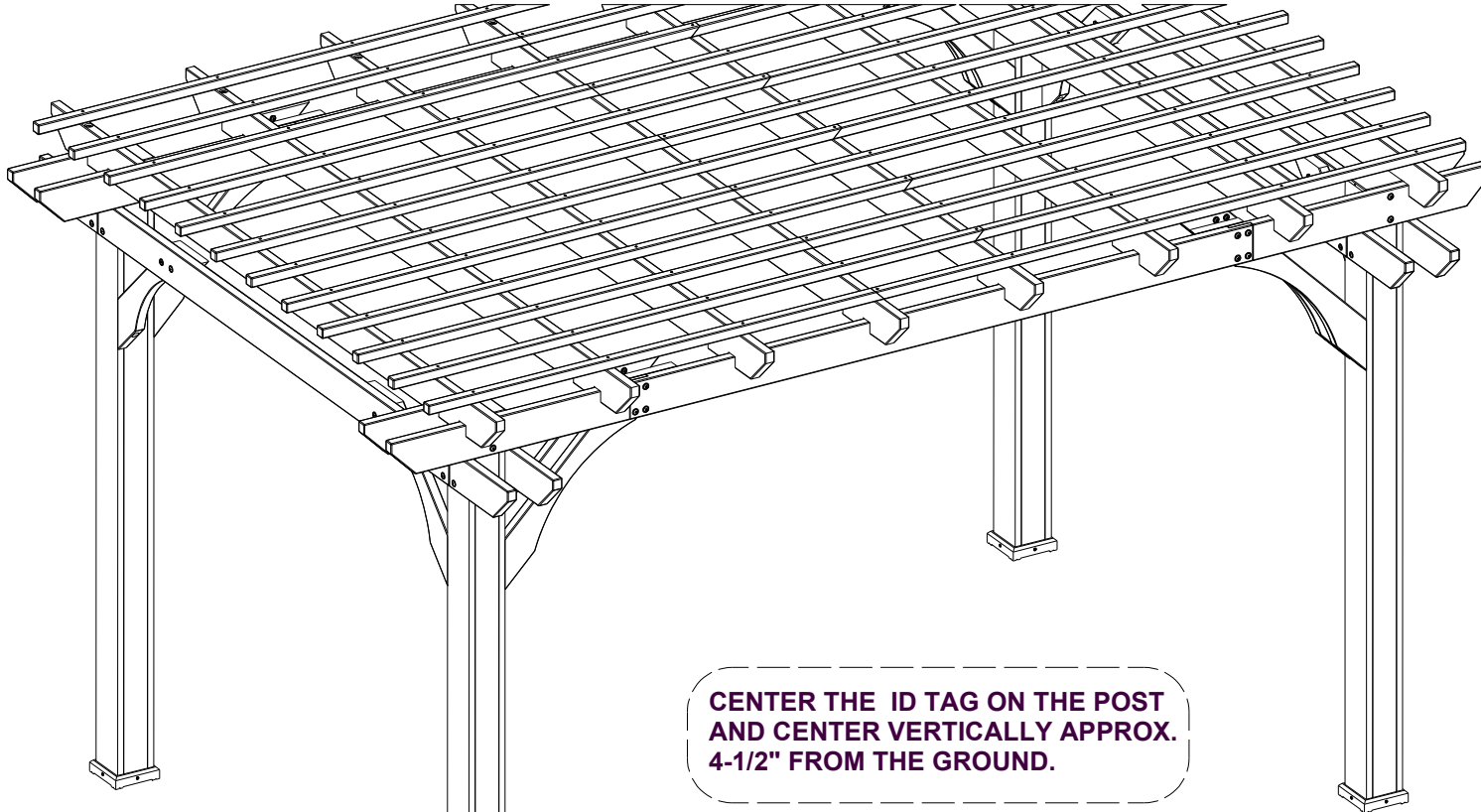
# STEP 12



A100241 | BYD ID TAG (SMALL) WITHOUT AGES  
(x1)

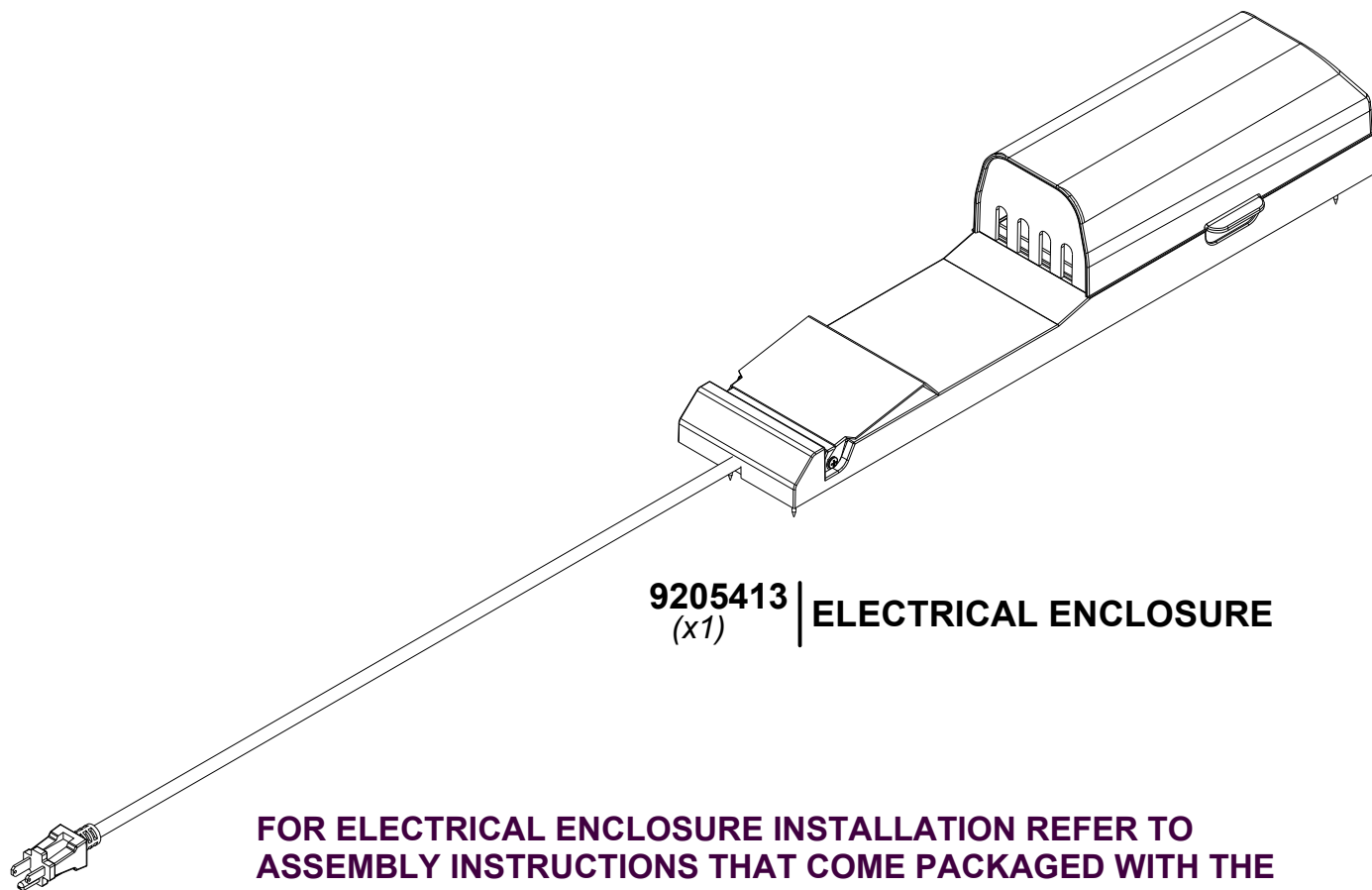
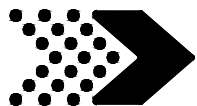


H100392 | SCREW PWH BLK  
(x2) | 8x3/4



241 (x1)  
BYD ID TAG (SMALL) WITHOUT AGES

392 (x2)  
SCREW - 3/4"



9205413 | ELECTRICAL ENCLOSURE  
(x1)

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