14x10 PERGOLA
Model # 1802513B
The assembly manual must be retained
since it contains important information

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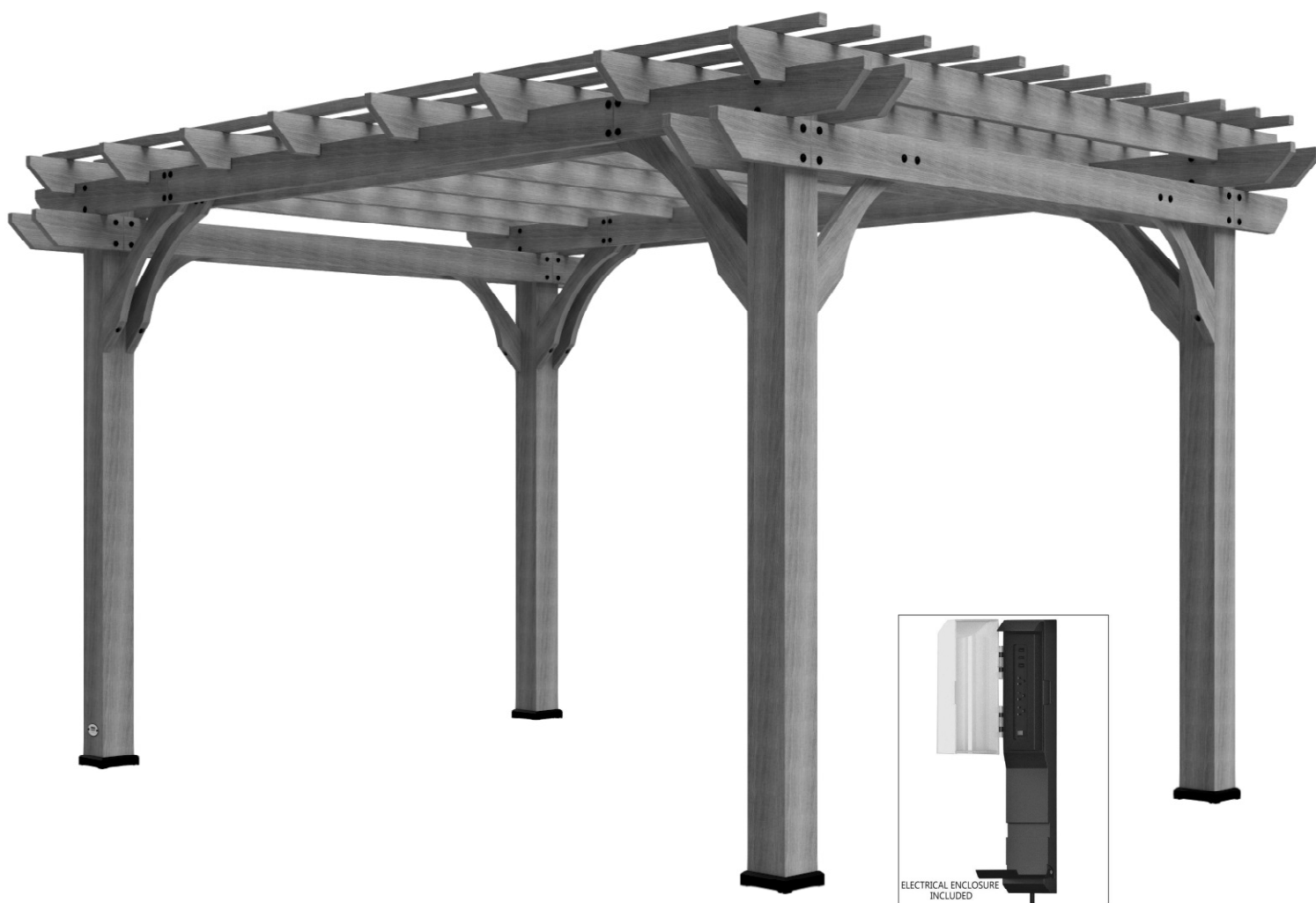
Please visit www.backyarddiscovery.com
For the most up to date assembly manual, to register your set, or to order replacement parts
Para obtener instrucciones en español, visite www.backyarddiscovery.com

BILT.®
EASY STEP-BY-STEP
3D INTERACTIVE INSTRUCTIONS
DOWNLOAD THE FREE APP
Download on the App Store
Get it on Google play

<u>Owner's Manual - Basic Setup Dimensions & Assembly Notes</u>

It is critically important that you start with square and level footings, concrete pad or deck to attach your structure
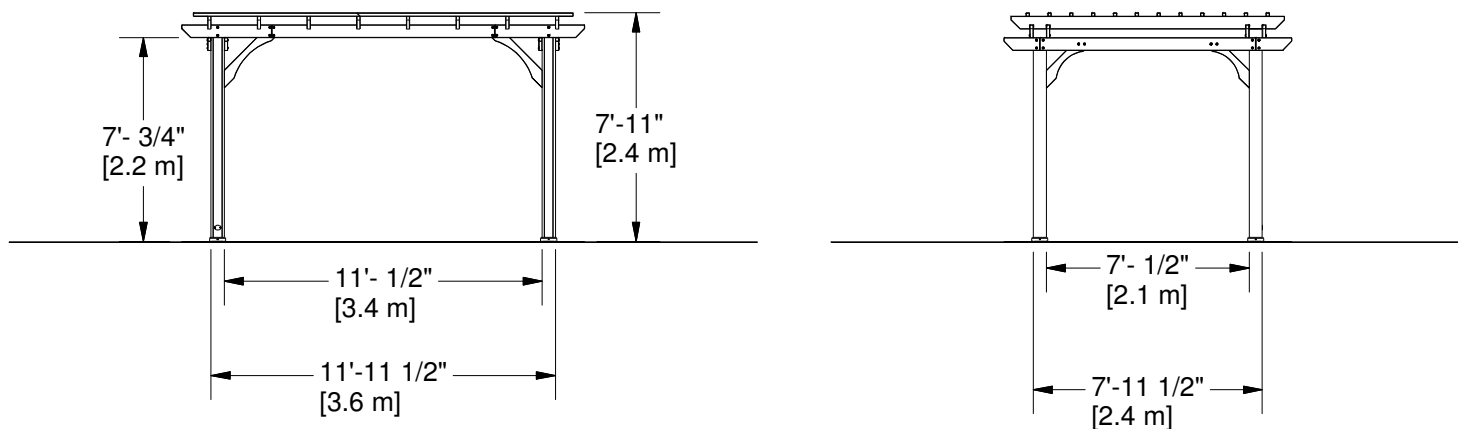
- Pay close attention to the items needed for each step. Make sure you are using the correct hardware for each step. Using incorrect hardware may result in improper assembly
- Remember to double check for underground utilities and overhead electrical lines

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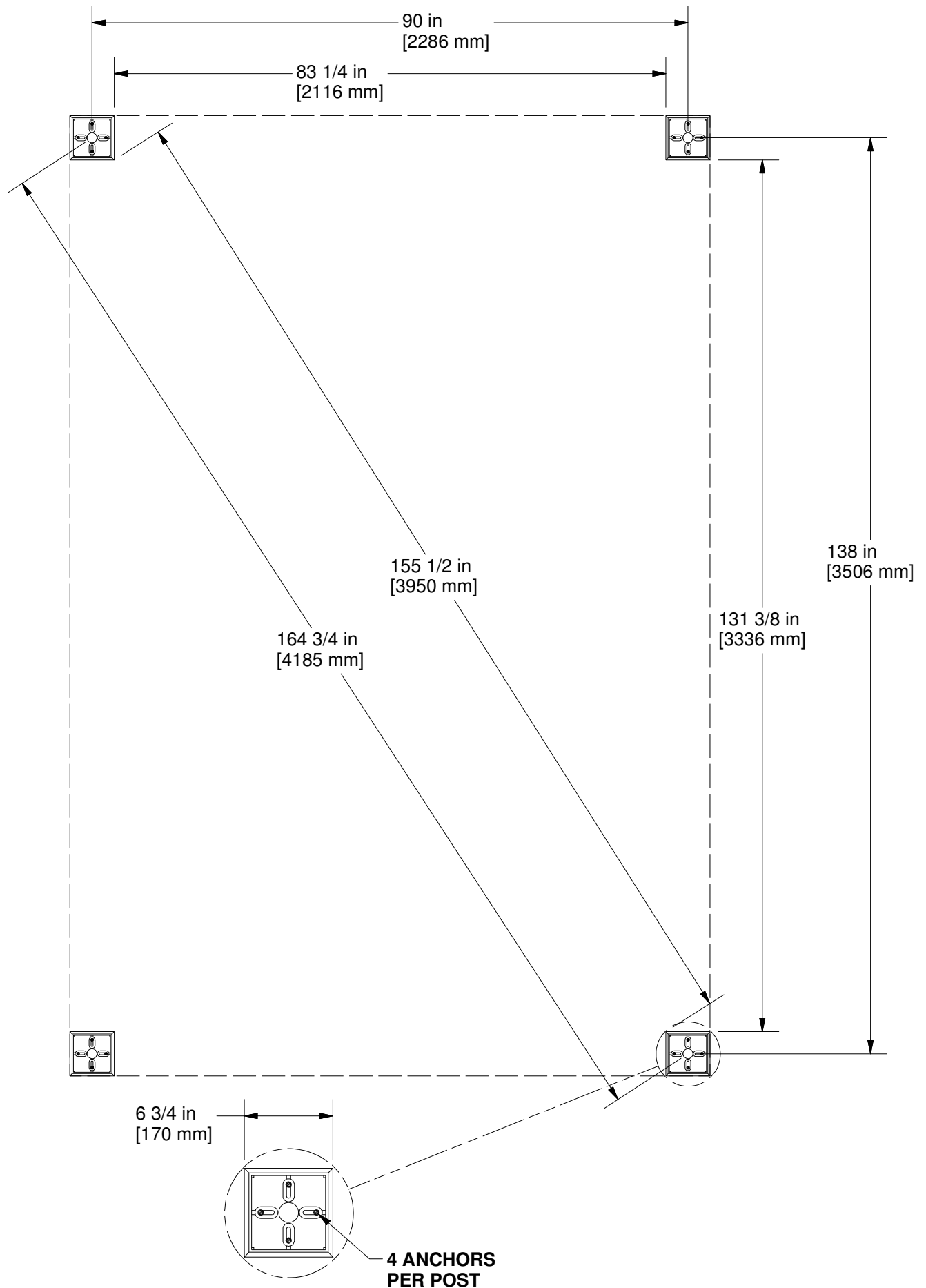
- The hardware to attach the post mounts to the structure is included.
- The hardware to mount the structure permanently to a concrete surface is included.
- The hardware to mount the structure permanently to a wood deck is NOT included and will need to be purchased separately. **You must ensure there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

Metal Roof Assembly

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

7'- 3/4"
[2.2 m]

7'-11"
[2.4 m]

11'- 1/2"
[3.4 m]

11'-11 1/2"
[3.6 m]

7'- 1/2"
[2.1 m]

7'-11 1/2"
[2.4 m]

Owner's Manual - Anchoring Layout

90 in
[2286 mm]

83 1/4 in
[2116 mm]

155 1/2 in
[3950 mm]

164 3/4 in
[4185 mm]

138 in
[3506 mm]

131 3/8 in
[3336 mm]

6 3/4 in
[170 mm]

**4 ANCHORS
PER POST**

Owner's Manual - Parts Identification

Wood Components (Not to Scale)

D1 **JOIST - W4L11635**
(x2) 1 3/8"x5 1/4"x92 7/8" (36x134x2360)

D2 **JOIST END - W4L11643**
(x4) 1 3/8"x5 1/4"x37 1/2" (36x134x954)

D3 **SLOTTED JOIST - W4L11637**
(x8) 1 3/8"x5 1/4"x114" (36x134x2896)

D4 **JOIST - W4L18489**
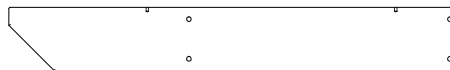*(x2)* 1 3/8"x5 1/4"x90" (36x134x2286)

D5 **JOIST - W4L11638**
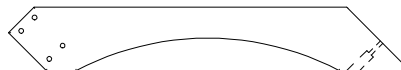*(x2)* 1 3/8"x5 1/4"x90" (36x134x2286)

D6 **JOIST END - W4L11633**
(x8) 1 3/8"x5 1/4"x15" (36x134x381)

D7 **JOIST END - W4L11634**
(x4) 1 3/8"x5 1/4"x37 1/2" (36x134x954)

D8 **LONG ANGLE BRACE - W4L18490**
(x8) 1 3/8"x5 1/4"x33 1/2" (36x134x850)

D9 **SHORT ANGLE BRACE - W4L18491**
(x4) 1 3/8"x5 1/4"x26 5/8" (36x134x675)

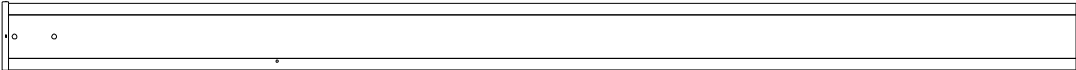# Owner's Manual - Parts Identification

Wood Components (Not to Scale)

D11 **JOIST - W4L11646**
(x2) 1 3/8"x5 1/4"x92 7/8" (36x134x2360)

P1 **PURLIN - W4L11639**
(x12) 1 3/8"x1 3/8"x69 5/8" (36x36x1767)

P2 **PURLIN - W4L11640**
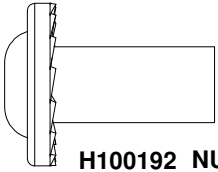*(x12)* 1 3/8"x1 3/8"x90 1/4" (36x36x2291)

WP2 **PERGOLA POST - W2A03771**
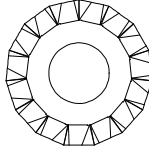*(x2)* 5 1/2"x5 1/2"x89 1/2" (140x140x2273)

WP1 **PERGOLA POST - W2A03772**
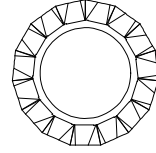*(x2)* 5 1/2"x5 1/2"x89 1/2" (140x140x2273)
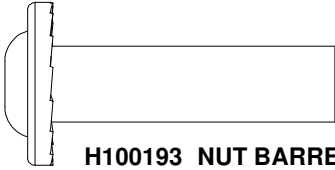
Owner's Manual - Parts Identification

Hardware Components

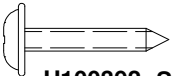**H100192** **NUT BARREL WH BLK**
(x40) *5/16x7/8*

H100193 **NUT BARREL WH BLK**
(x24) *5/16x1-1/2*

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

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

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

H100205 **BOLT WH BLK**
(x40) *5/16x2-1/4*

H100792 **LAG SCREW WH BLK**
(x12) *1/4x3*

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

H100196 **BOLT WH BLK**
(x24) *5/16x7-1/4*

H100198 **WASHER LOCK EXT BLK**
(x80) *8x19*

H100199 **WASHER LOCK EXT BLK**
(x64) *12x19*

H100405 **WASHER LOCK EXT BLK**
(x12) *6x15*
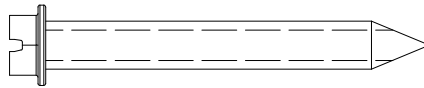
H100120 **SCREW CONCRETE ANCHOR**
(x16) *1/4x2*
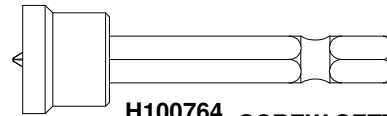
H100764 **SCREW SETTER**
(x1)
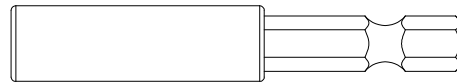
H101100 **MAGNETIC DRIVER**
(x1)

H100147 **T-30 TORX BIT**
(x1)
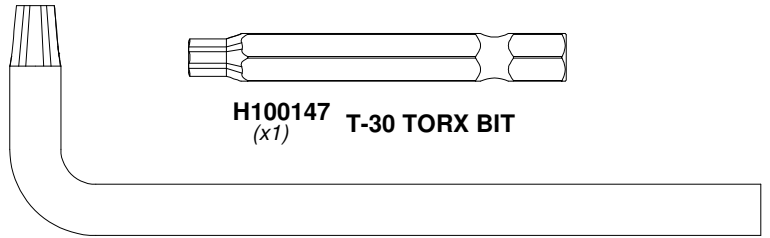
H100114 **T-30 TORX WRENCH**
(x1)

Owner's Manual - Parts Identification

Accessory Components (Not to Scale)
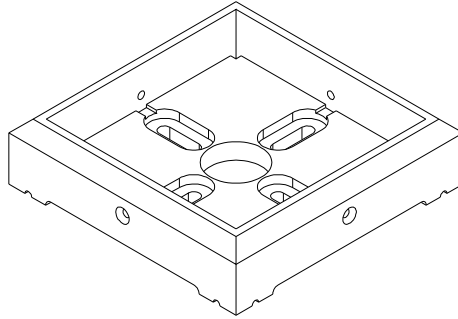
A100029
(x4) **FOOT 142 SQUARE POST**

A100241
(x1) **BYD ID TAG (SMALL) WITHOUT AGES**
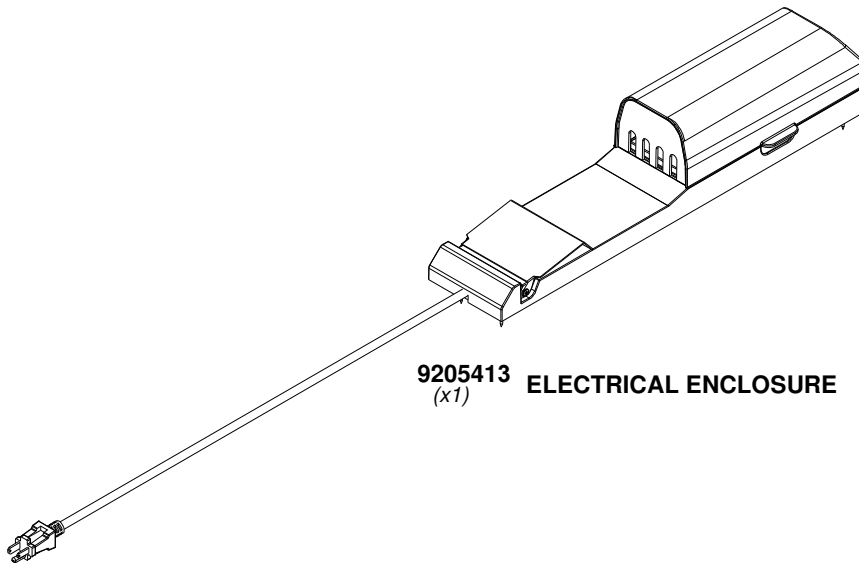
9205413
(x1) **ELECTRICAL ENCLOSURE**

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.

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.

H100194
(x2)

BOLT WH
5/16 x 2-1/2
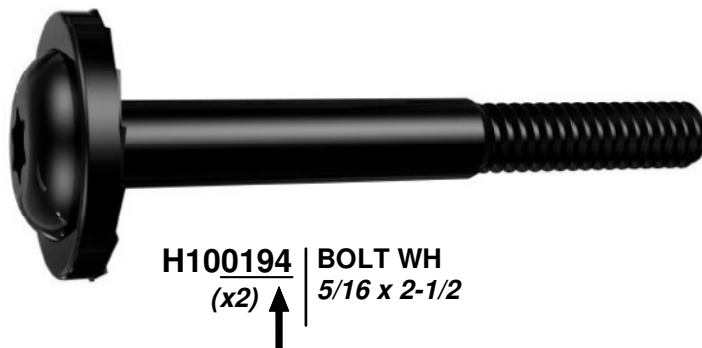
PRE-ASSEMBLY STEP 2 - TOOLS REQUIRED

**Drill Attachments:
Phillips Head**

Open End Wrenches 1/2" & 9/16"

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

**3/8" Drive Ratchet, 1/2" &
9/16" STD Sockets 1/2" & 9/16" Deep
Sockets**

Phillips Screw Driver

**Cordless Drill or
Electric Drill**

Claw Hammer

Rubber Mallet - Optional

Tape Measure
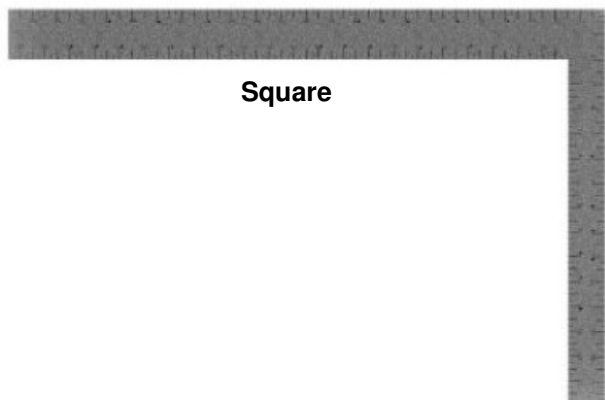
Square

Level 24"

PRE-ASSEMBLY STEP 3 - CHOOSE YOUR ASSEMBLY METHOD

<u>There are several types of assembly instructions available to you.</u>
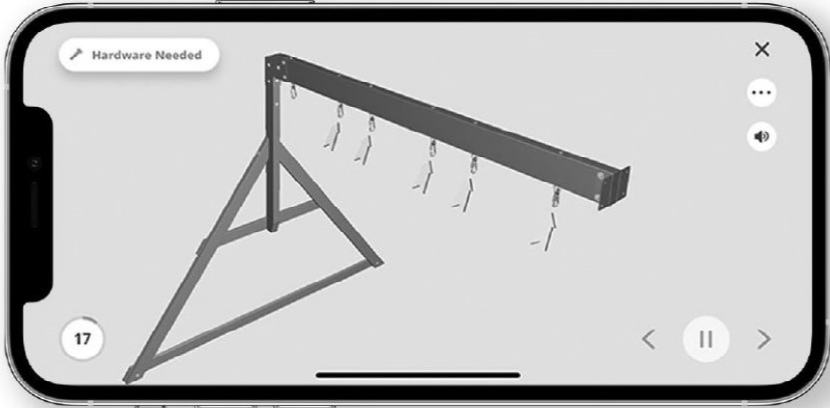
1. **Printed Assembly Manual included with your set**
2. **BILT APP - 3D interactive instructions**
3. **Combination of the Printed Manual and BILT APP (Note: Step numbers can differ between the two methods)**

STEP 1 - PERGOLA ASSEMBLY
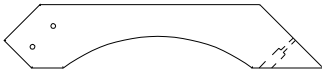
D9 **SHORT ANGLE BRACE - W4L18491**
(x4)   1 3/8"x5 1/4"x26 5/8" (36x134x675)

D4 **JOIST - W4L18489**
(x2)   1 3/8"x5 1/4"x90" (36x134x2286)

QTY	PART NUMBER	DESCRIPTION
8	H100192	NUT BARREL WH 5/16x7/8 BLK
8	H100198	WASHER LOCK EXT 8x19 BLK
8	H100199	WASHER LOCK EXT 12x19 BLK
8	H100205	BOLT WH 5/16x2-1/4 BLK

REPEAT PROCESS FOR OPPOSITE SIDE.

HAND TIGHTEN ONLY AT THIS TIME.

198 (x4)
WASHER - 8x19

205 (x4)
BOLT - 2 1/4"

199 (x4)
WASHER - 12x19

192 (x4)
NUT BARREL - 7/8"

D4 (x1)

D9 (x2)

STEP 2 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
16	H100192	NUT BARREL WH 5/16x7/8 BLK
16	H100198	WASHER LOCK EXT 8x19 BLK
16	H100199	WASHER LOCK EXT 12x19 BLK
16	H100205	BOLT WH 5/16x2-1/4 BLK

D2   **JOIST END - W4L11643**
(x4)   *1 3/8"x5 1/4"x37 1/2" (36x134x954)*

D8   **LONG ANGLE BRACE - W4L18490**
(x4)   *1 3/8"x5 1/4"x33 1/2" (36x134x850)*

D11   **JOIST - W4L11646**
(x2)   *1 3/8"x5 1/4"x92 7/8" (36x134x2360)*

REPEAT PROCESS FOR OPPOSITE SIDE.

HAND TIGHTEN ONLY AT THIS TIME.

D2 (x2)

199 (x8)
WASHER - 12x19

192 (x8)
NUT BARREL - 7/8"

205 (x8)
BOLT - 2 1/4"

198 (x8)
WASHER - 8x19

D11 (x1)

D8 (x2)

12

STEP 3 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
16	H100192	NUT BARREL WH 5/16x7/8 BLK
16	H100198	WASHER LOCK EXT 8x19 BLK
16	H100199	WASHER LOCK EXT 12x19 BLK
16	H100205	BOLT WH 5/16x2-1/4 BLK

D7 **JOIST END - W4L11634**
(x4) *1 3/8"x5 1/4"x37 1/2" (36x134x954)*

D8 **LONG ANGLE BRACE - W4L18490**
(x4) *1 3/8"x5 1/4"x33 1/2" (36x134x850)*

D1 **JOIST - W4L11635**
(x2) *1 3/8"x5 1/4"x92 7/8" (36x134x2360)*

REPEAT PROCESS FOR OPPOSITE SIDE.

****HAND TIGHTEN ONLY AT THIS TIME.****

D7 *(x2)*

199 *(x8)* **WASHER - 12x19**

192 *(x8)* **NUT BARREL - 7/8"**

205 *(x8)* **BOLT - 2 1/4"**

198 *(x8)* **WASHER - 8x19**

D1 *(x1)*

D8 *(x2)*

13

STEP 4 - PERGOLA ASSEMBLY

D5 **JOIST - W4L11638**
(x2) *1 3/8"x5 1/4"x90" (36x134x2286)*

WP2 **PERGOLA POST - W2A03771**
(x2) *5 1/2"x5 1/2"x89 1/2" (140x140x2273)*

WP1 **PERGOLA POST - W2A03772**
(x2) *5 1/2"x5 1/2"x89 1/2" (140x140x2273)*

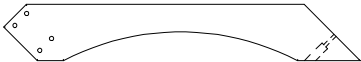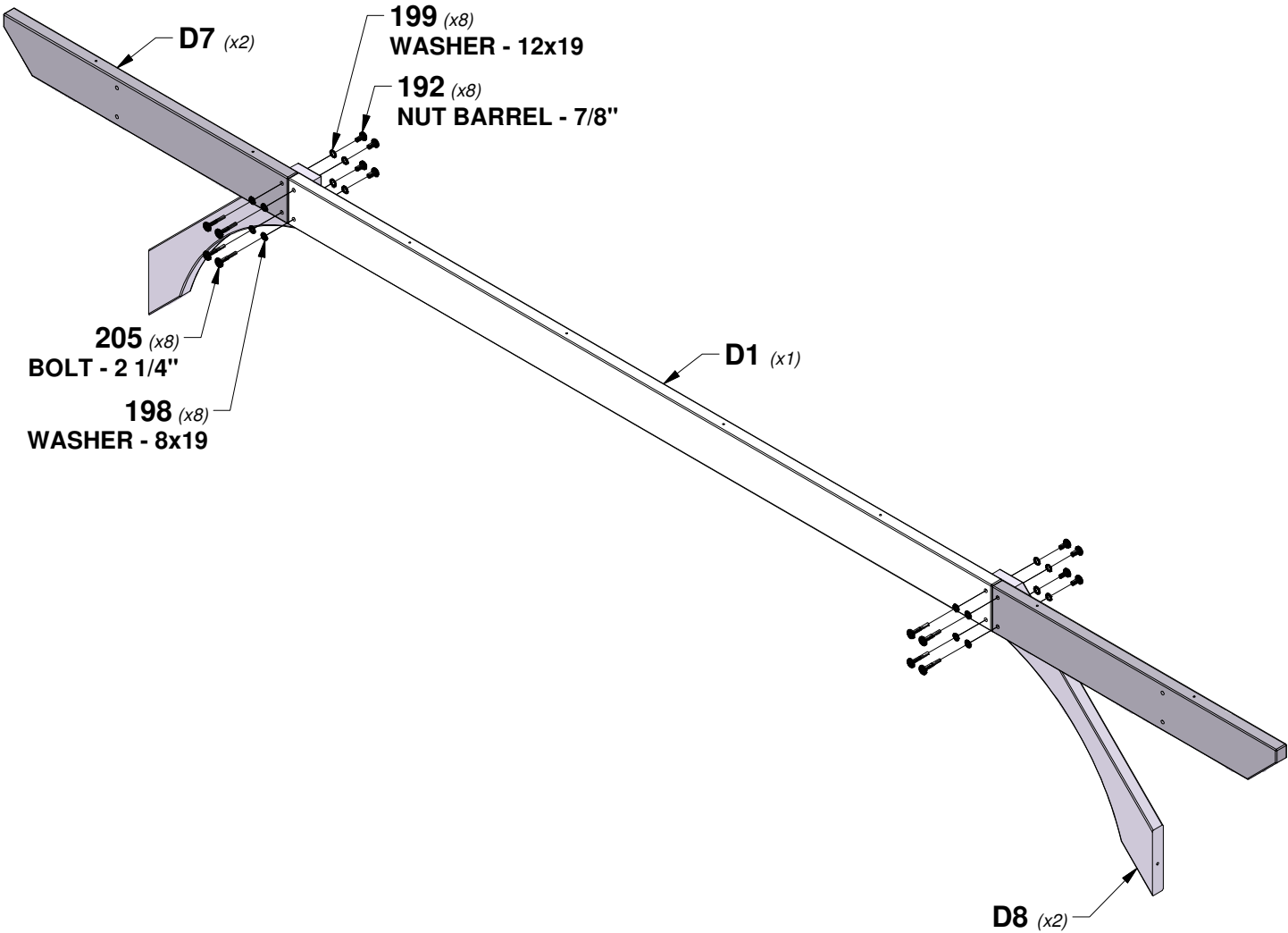| QTY	PART NUMBER	DESCRIPTION
8	H100193	NUT BARREL WH 5/16x1-1/2 BLK
8	H100196	BOLT WH 5/16x7-1/4 BLK
8	H100198	WASHER LOCK EXT 8x19 BLK
8	H100199	WASHER LOCK EXT 12x19 BLK
4	H100405	WASHER LOCK EXT 6x15 BLK
4	H100792	LAG SCREW WH 1/4x3 BLK

REPEAT PROCESS FOR OPPOSITE SIDE.

199 *(x4)*
WASHER - 12x19

193 *(x4)*
NUT BARREL - 1 1/2"

198 *(x4)*
WASHER - 8x19

196 *(x4)*
BOLT - 7-1/4

D5 *(x1)*

405 *(x2)*
WASHER - 6x15

792 *(x2)*
LAG SCREW - 3"

ASSEMBLY FROM STEP 1

NOTE: ALIGN CORBELS WITH PILOT HOLES IN POST

WP1 *(x1)*

WP2 *(x1)*

14
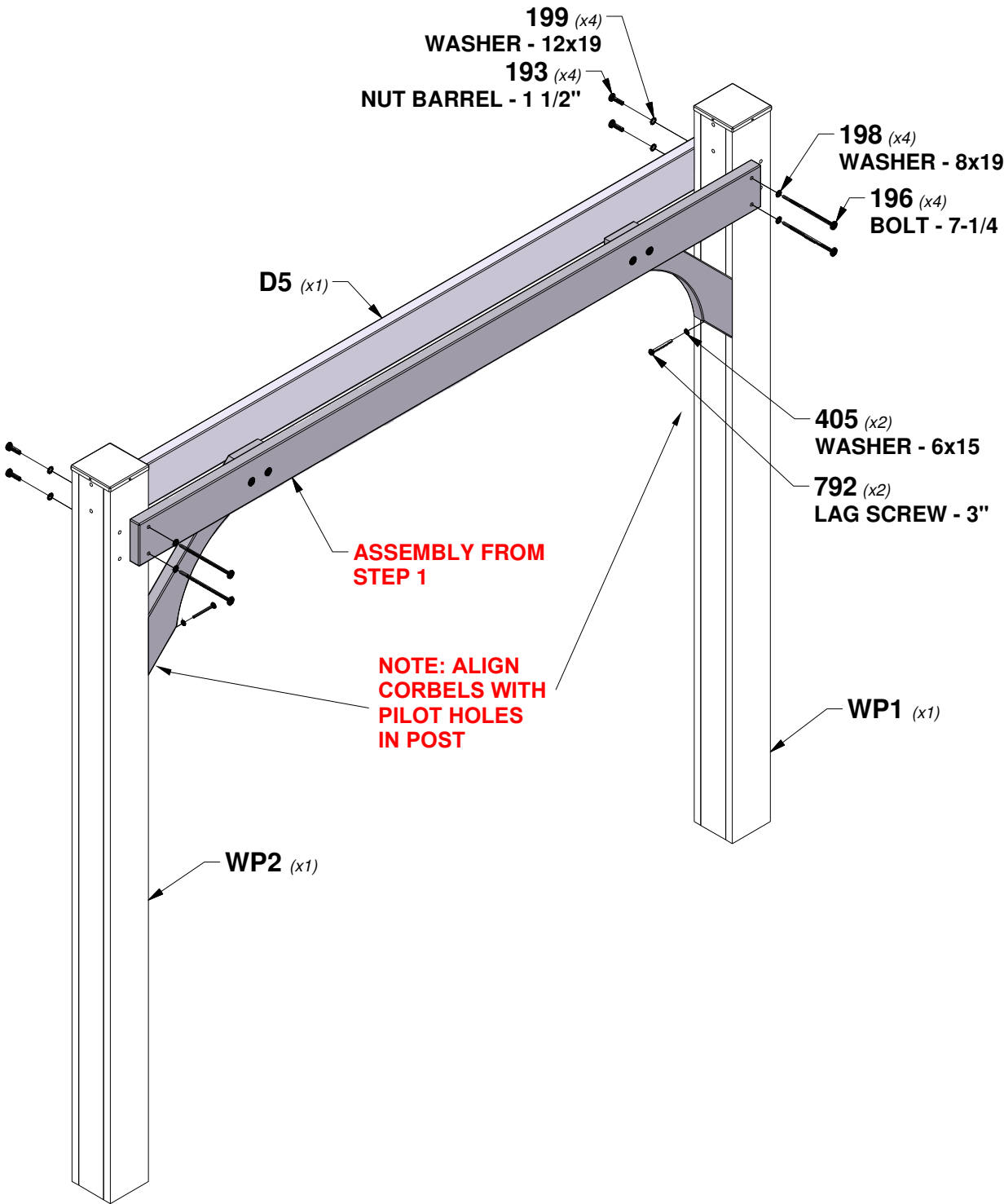
STEP 5 - PERGOLA ASSEMBLY

D6 **JOIST END - W4L11633**
(x8) 1 3/8"x5 1/4"x15" (36x134x381)

QTY	PART NUMBER	DESCRIPTION
8	H100193	NUT BARREL WH 5/16x1-1/2 BLK
8	H100196	BOLT WH 5/16x7-1/4 BLK
8	H100198	WASHER LOCK EXT 8x19 BLK
8	H100199	WASHER LOCK EXT 12x19 BLK

REPEAT PROCESS FOR OPPOSITE SIDE.

199 (x4)
WASHER - 12x19

193 (x4)
NUT BARREL - 1 1/2"

D6 (x4)

198 (x4)
WASHER - 8x19

196 (x4)
BOLT - 7-1/4

15
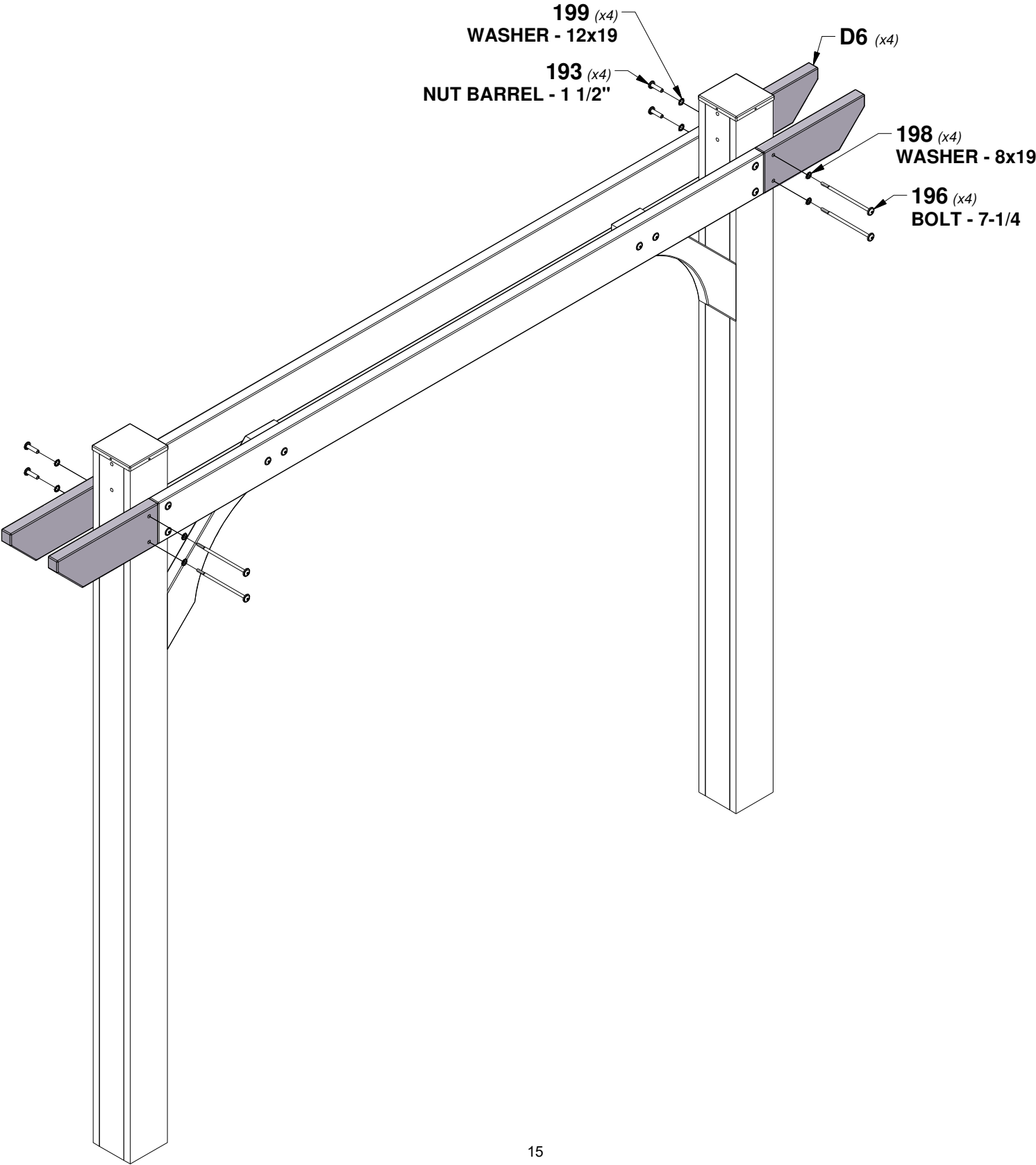
STEP 6 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
8	H100193	NUT BARREL WH 5/16x1-1/2 BLK
8	H100196	BOLT WH 5/16x7-1/4 BLK
8	H100198	WASHER LOCK EXT 8x19 BLK
8	H100199	WASHER LOCK EXT 12x19 BLK
8	H100405	WASHER LOCK EXT 6x15 BLK
8	H100792	LAG SCREW WH 1/4x3 BLK

198 (x8)
WASHER - 8x19

196 (x8)
BOLT - 7-1/4

199 (x8)
WASHER - 12x19

193 (x8)
NUT BARREL - 1 1/2"

792 (x8)
LAG SCREW - 3"

405 (x8)
WASHER - 6x15

NOTE HOLE LOCATIONS

NOTE HOLE LOCATIONS

ASSEMBLY FROM STEP 3

ASSEMBLY FROM STEP 2

ASSEMBLY FROM STEP 2

ASSEMBLY FROM STEP 3
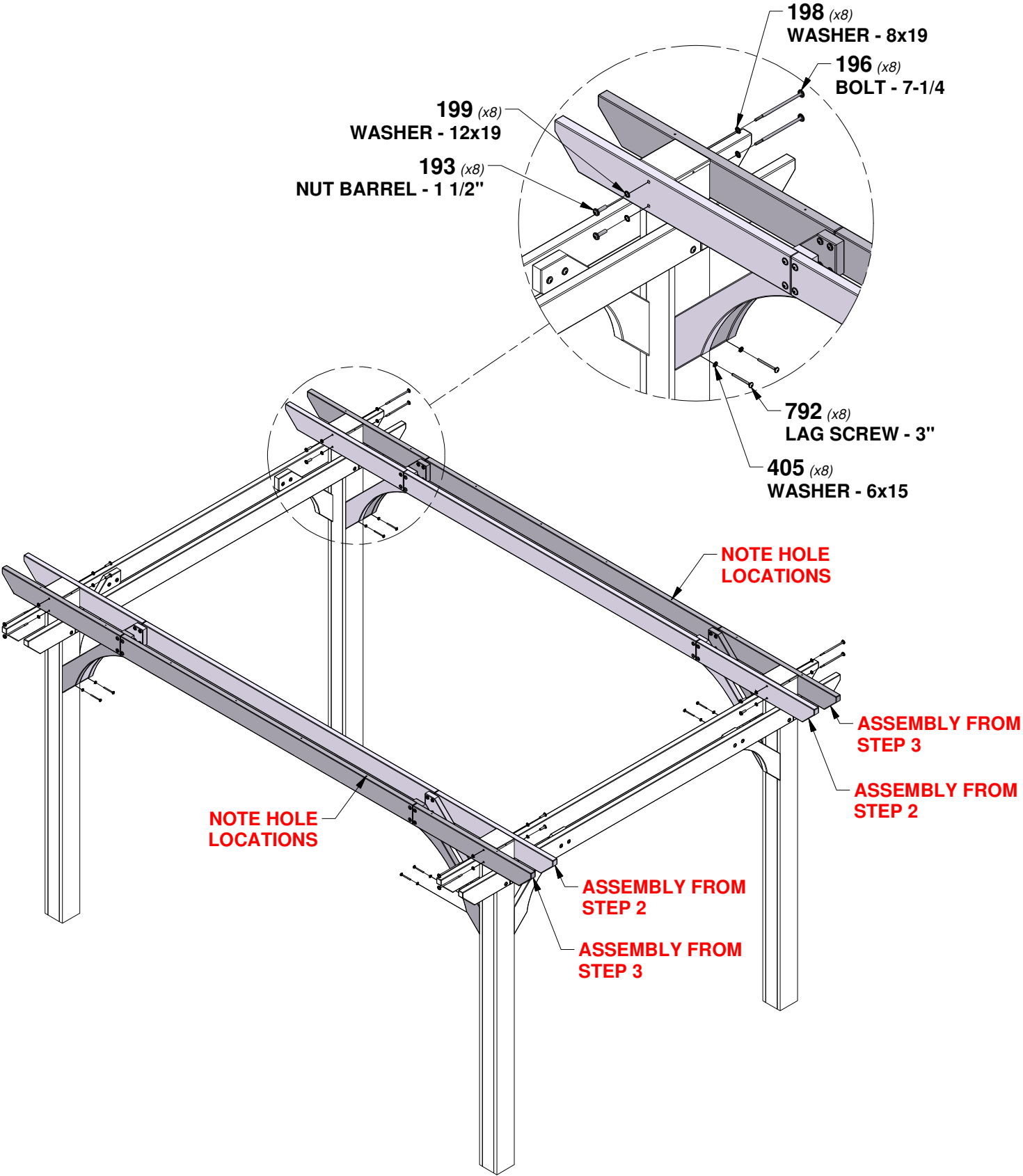
STEP 7 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
16	H100198	WASHER LOCK EXT 8x19 BLK
16	H100204	LAG SCREW WH 5/16x5-1/2 BLK

D3 SLOTTED JOIST - W4L11637
(x8) *1 3/8"x5 1/4"x114" (36x134x2896)*
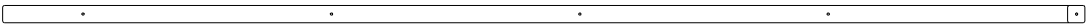
ALIGN JOIST OVER PILOT HOLES IN LOWER JOIST

D3 *(x8)*

204 *(x16)*
LAG SCREW - 5 1/2"

198 *(x16)*
WASHER - 8x19
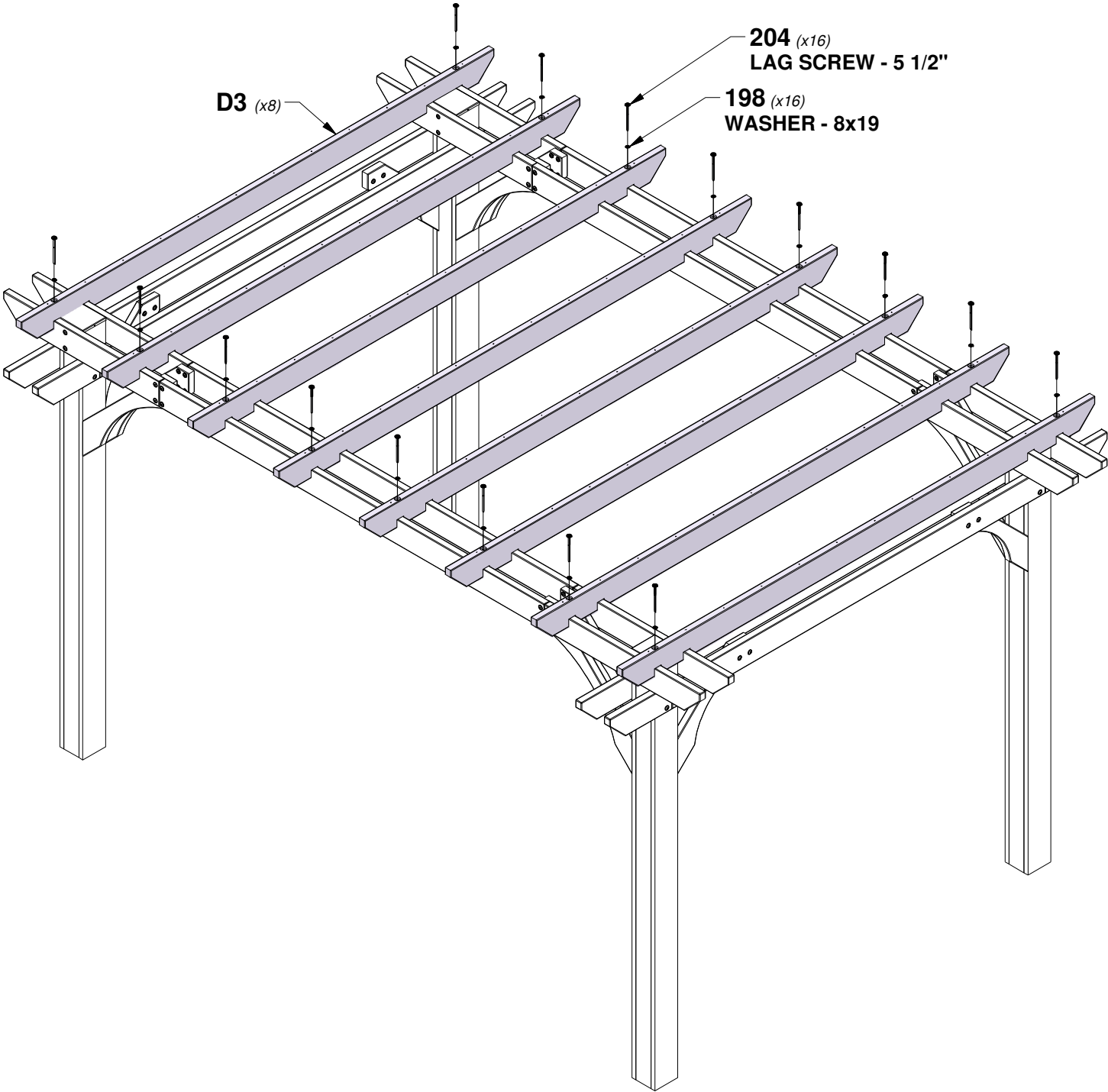
STEP 8 - PERGOLA ASSEMBLY

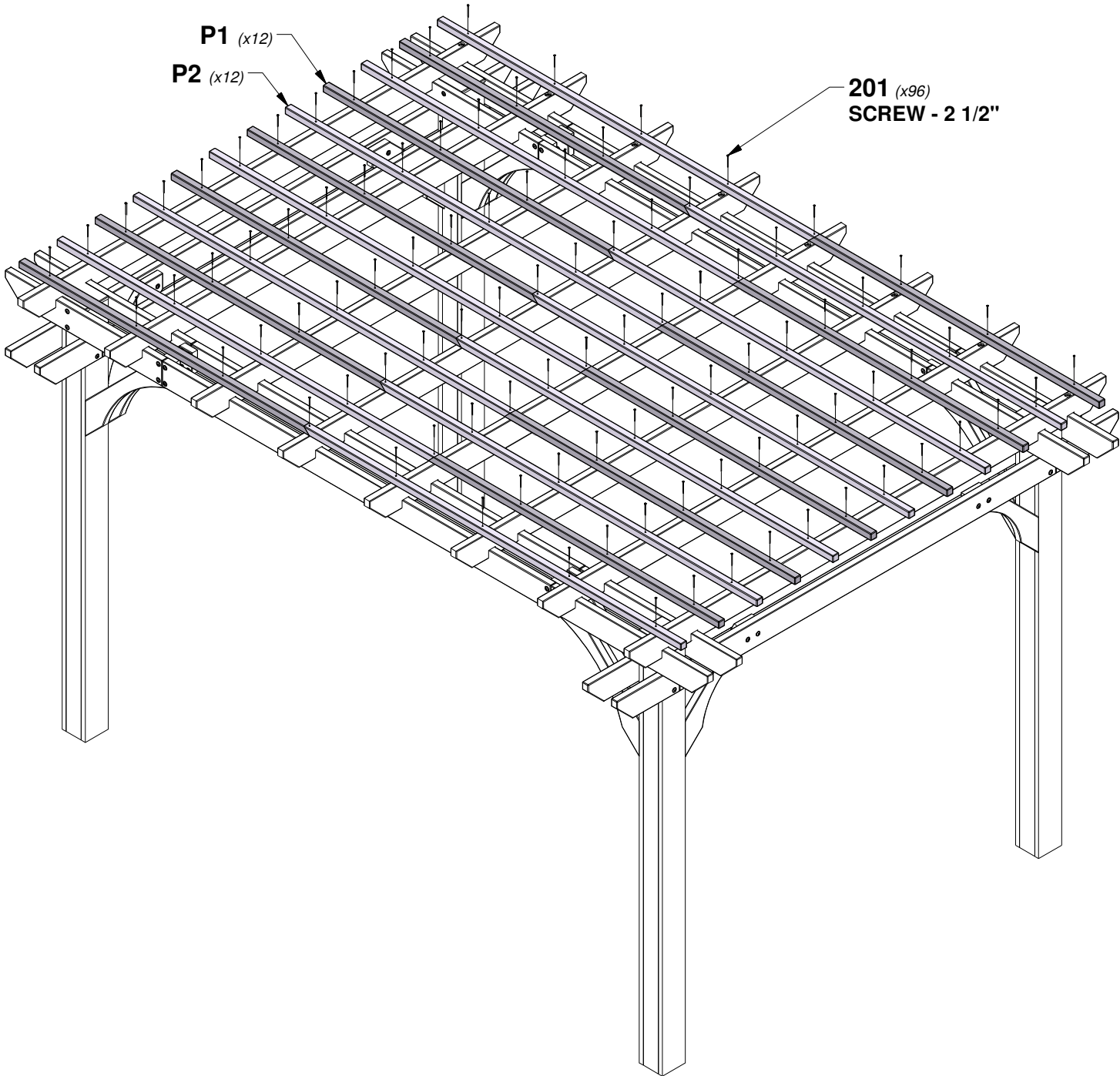| QTY	PART NUMBER	DESCRIPTION
96	H100201	SCREW PFH 8x2-1/2 BLK
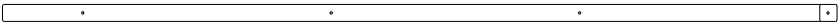
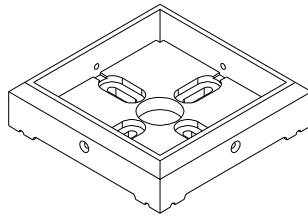**P1** **PURLIN - W4L11639**
(x12)   1 3/8"x1 3/8"x69 5/8" (36x36x1767)

P2 **PURLIN - W4L11640**
(x12)   1 3/8"x1 3/8"x90 1/4" (36x36x2291)

ASSEMBLE REMAINING P1 AND P2 PURLINS ALTERNATING LOCATIONS AS SHOWN.

P1 (x12)

P2 (x12)
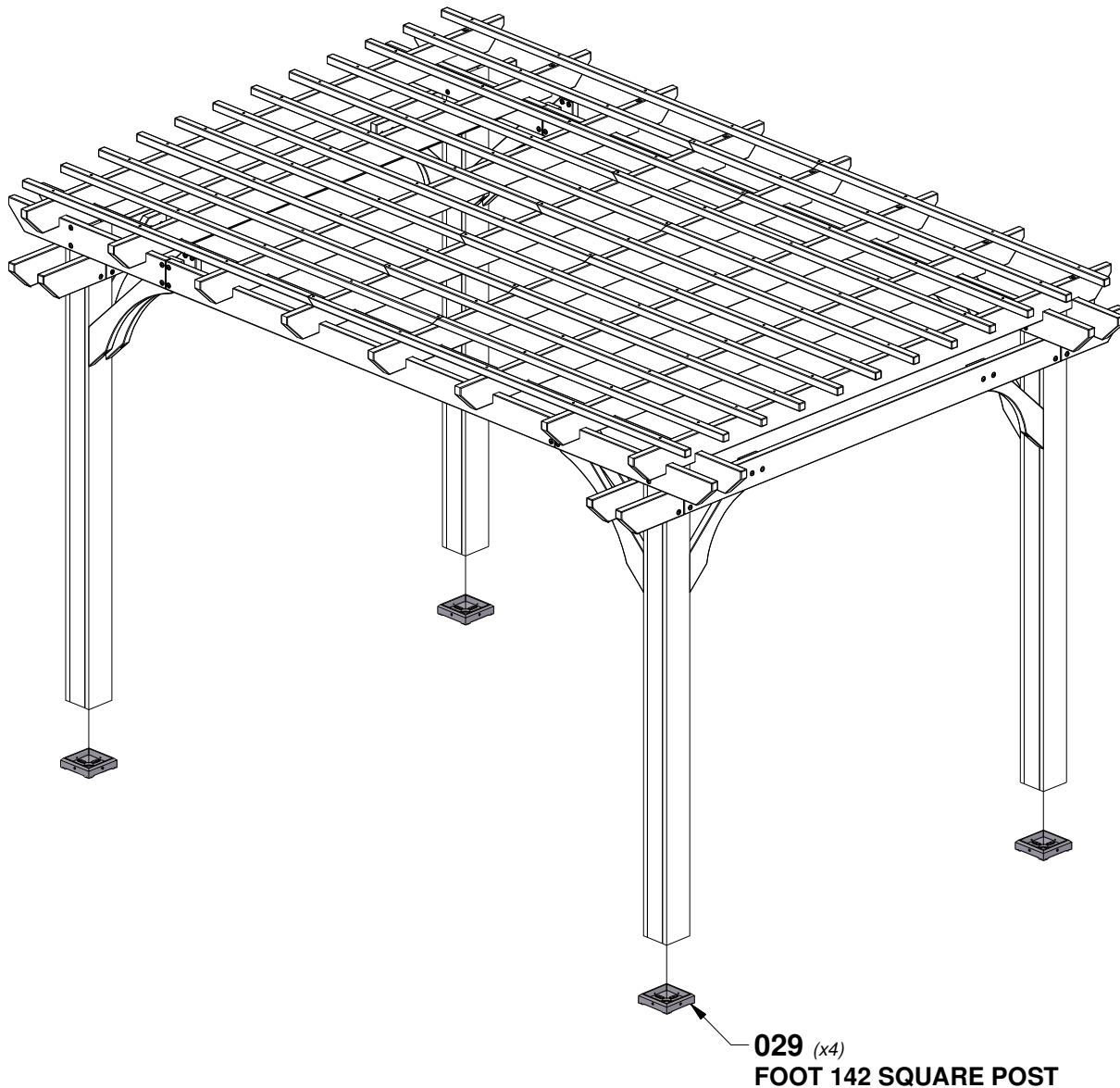
201 (x96)
SCREW - 2 1/2"

STEP 9 - PERGOLA ASSEMBLY
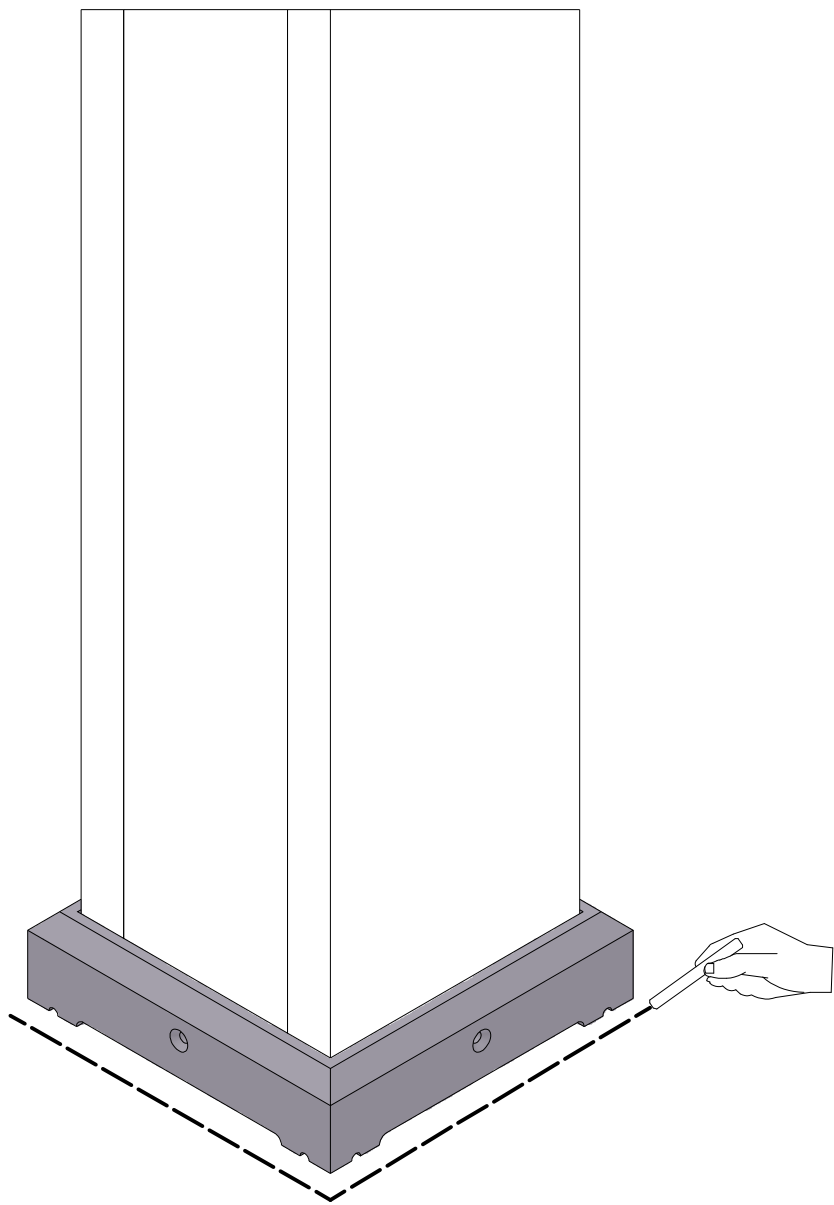
A100029 (x4) | **FOOT 142 SQUARE POST**

DECIDE WHERE TO PLACE THE PERGOLA; GRASS, CONCRETE OR OTHER MATERIAL. PLACE THE PERGOLA EXACTLY WHERE IT WILL BE ANCHORED WHEN COMPLETED AND SLIDE A FOOT UNDER EACH POST 'WP1'.

NOTE:
IF NOT PLACING ON CONCRETE, PROCEED TO STEP 13.

029 (x4)
FOOT 142 SQUARE POST

STEP 10 - PERGOLA ASSEMBLY

USE CHALK TO TRACE AROUND THE EDGES OF EACH FOOT.

STEP 11 - PERGOLA ASSEMBLY

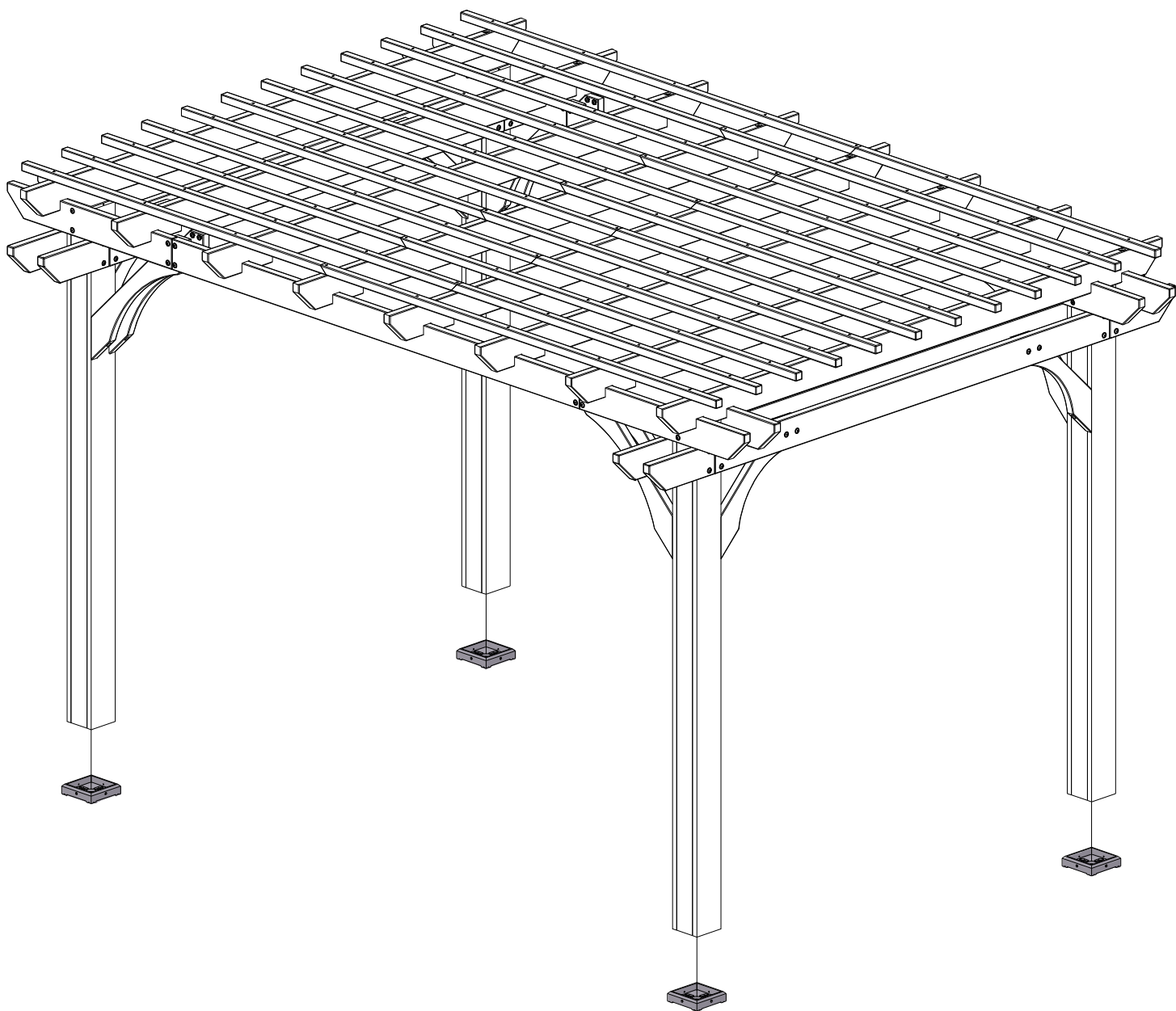| QTY	PART NUMBER	DESCRIPTION
16	H100120	CONCRETE ANCHOR 1/4x2

MOVE THE PERGOLA ASIDE. PLACE EACH FOOT INSIDE OF THE LINES DRAWN IN STEP 14. USING A CONCRETE DRILL BIT, PILOT DRILL ATTACHMENT HOLES INTO THE CONCRETE PAD.

*NEXT, USE THE 1/4"x2" CONCRETE ANCHORS TO ATTACH EACH FOOT TO THE CONCRETE SURFACE.*

120 (x4)
SCREW - 2"

029 (x4)
FOOT 142 SQUARE POST
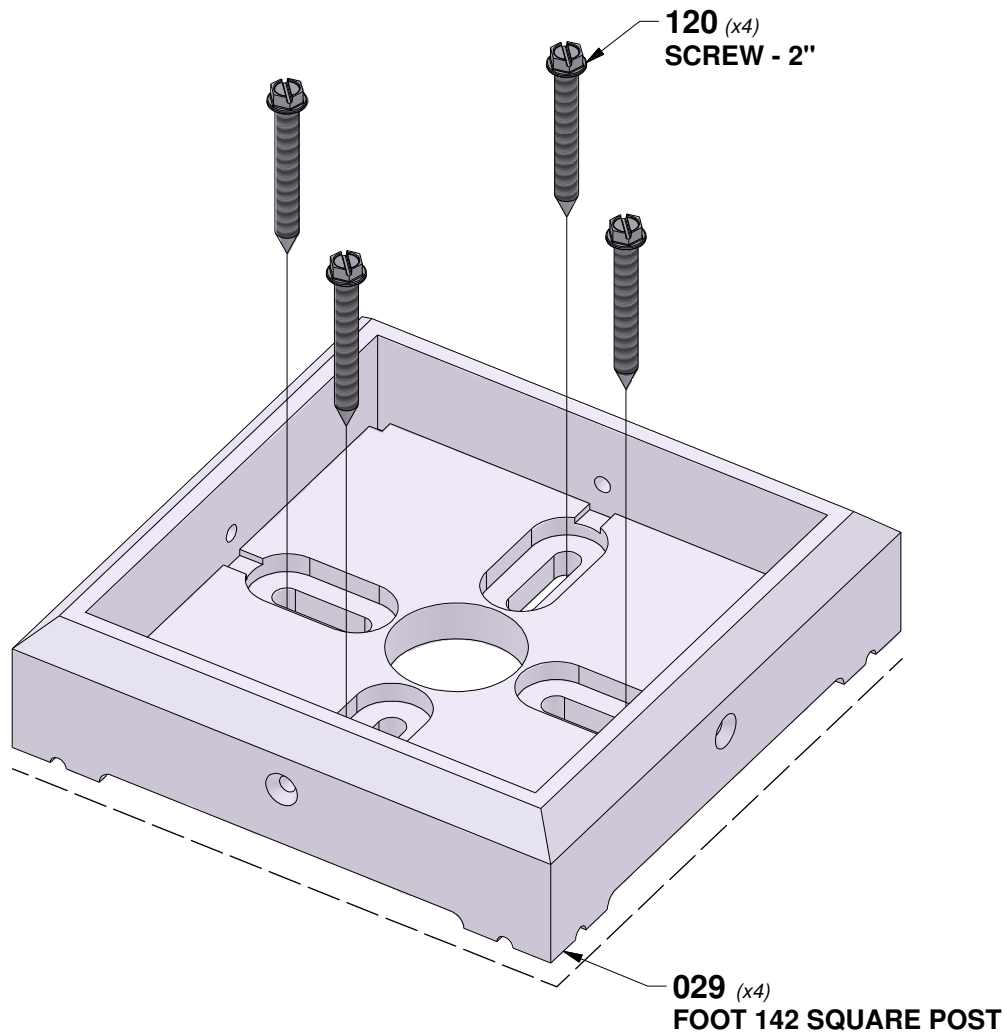
STEP 12 - PERGOLA ASSEMBLY

SET THE PERGOLA BACK IN PLACE, SETTING EACH POST 'WP1' INSIDE AN FOOT.

STEP 13 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
16	H100200	SCREW PFH 8x1-1/2 BLK

ATTACH FEET TO EACH 'WP1' POST USING 1-1/2" SCREWS INTO EACH SIDE OF FOOT, AS SHOWN.

200 (x16)
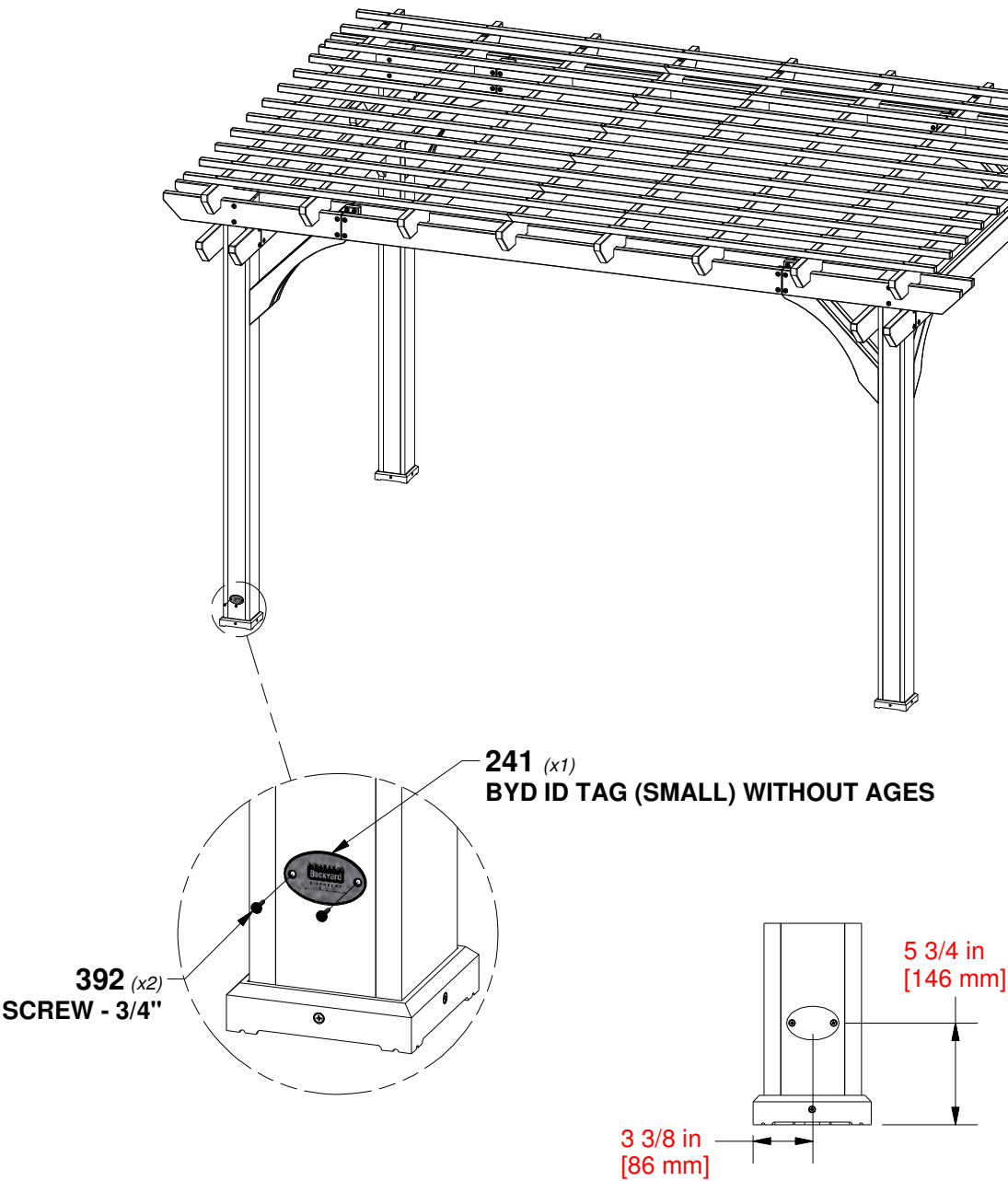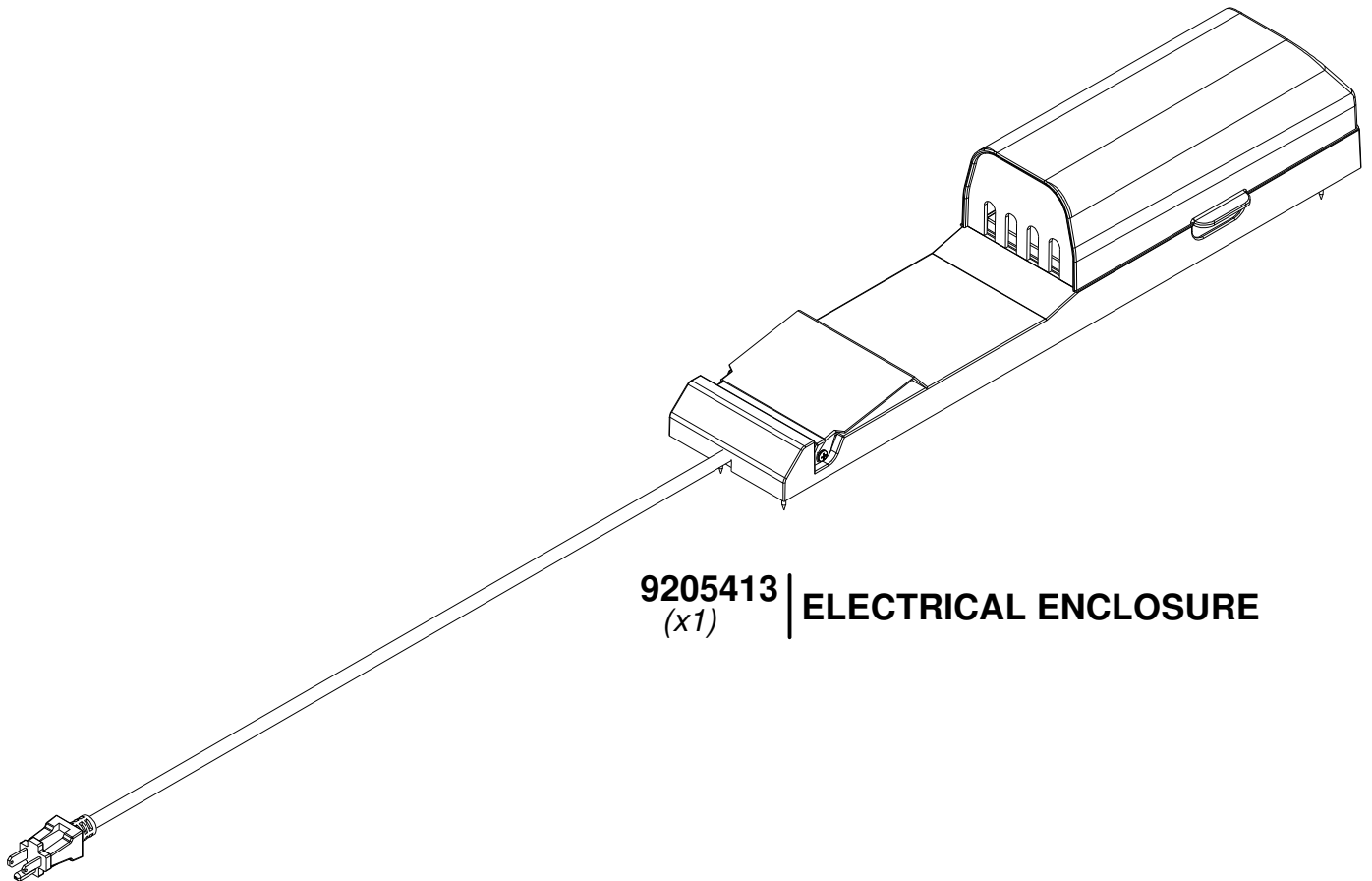**SCREW - 1 1/2"**
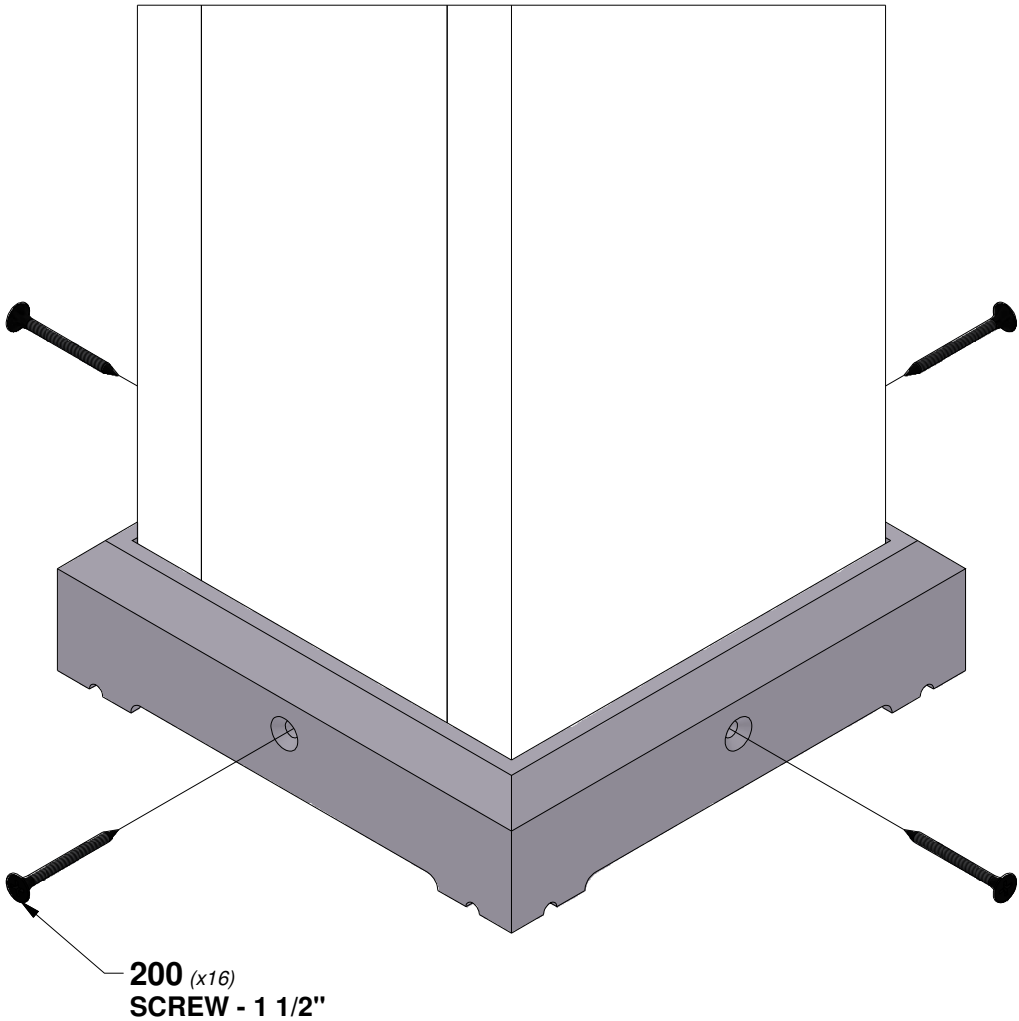
STEP 14 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
2	H100392	SCREW PWH 8x3/4 BLK

A100241 (x1)

BYD ID TAG (SMALL) WITHOUT AGES

PLACE I.D. PLACARD ON FRONT OF POST APPROXIMATELY AS SHOWN.

SQUARE POSTS AND TIGHTEN ALL HARDWARE AT THIS TIME.

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

392 (x2)
SCREW - 3/4"

5 3/4 in
[146 mm]

3 3/8 in
[86 mm]

PowerPort™

9205413
(x1) | ELECTRICAL ENCLOSURE

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