



Manufactured by:  
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# CALLAHAN PERGOLA SWING

## MODEL # : 2305106



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



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



INSTALLATION  
SERVICES  
AVAILABLE!\*

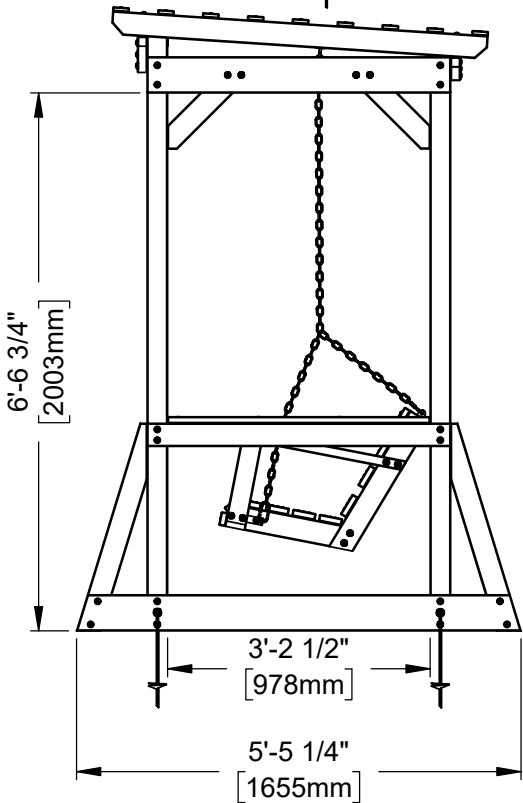
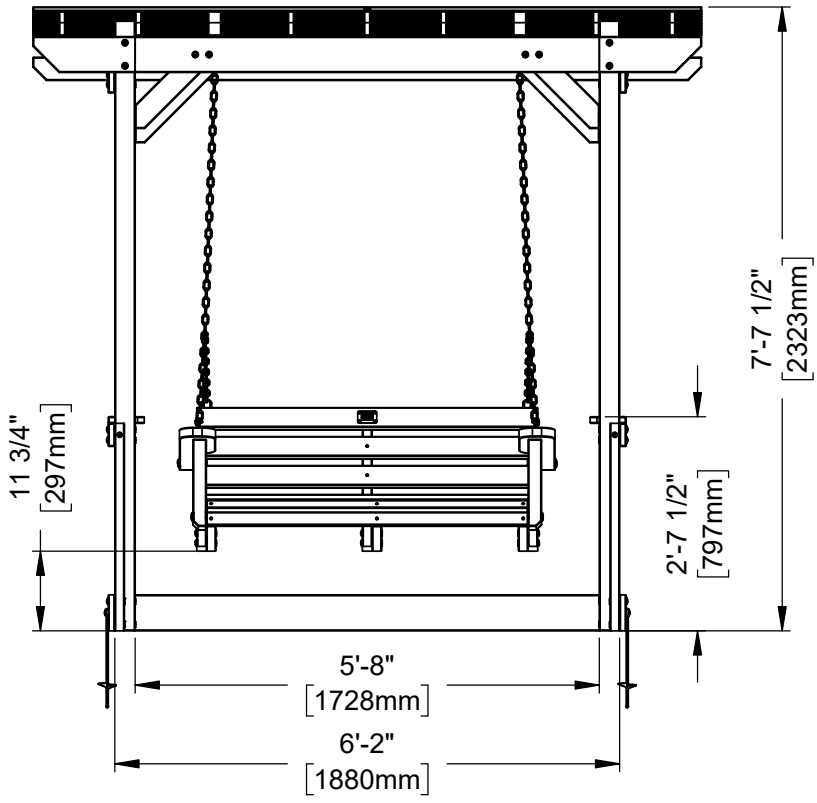
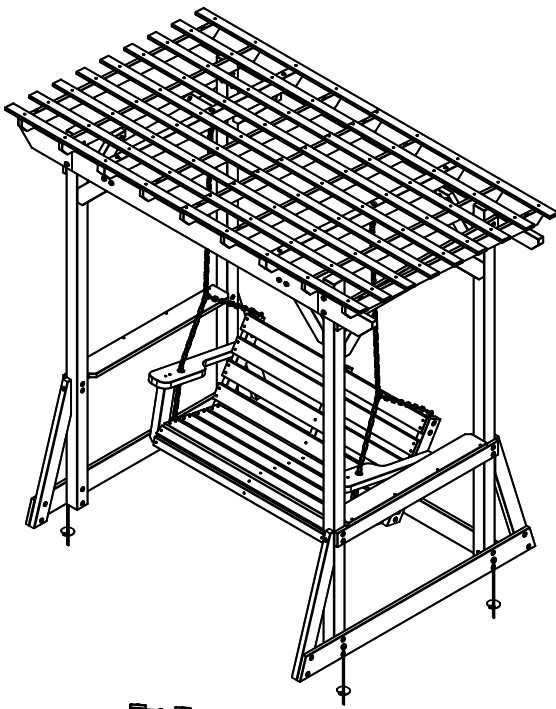
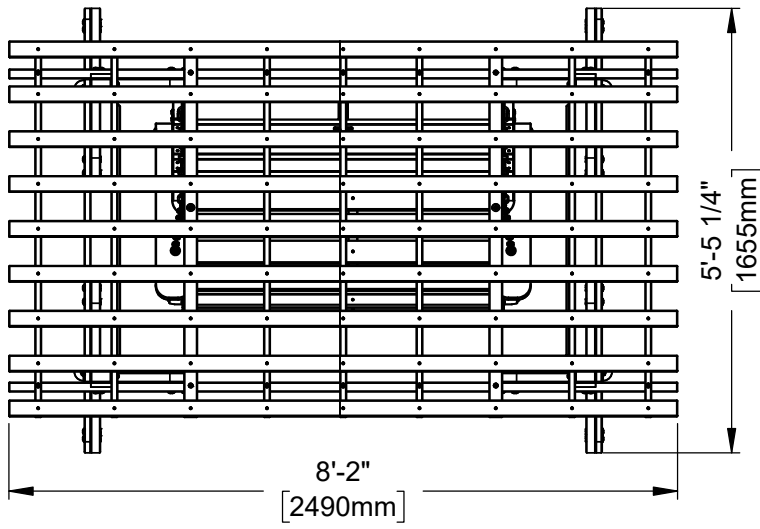
See inside for details

# OWNER'S MANUAL - BASIC SETUP DIMENSIONS & ASSEMBLY NOTES

- 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 provided are for grass surfaces. See Anchor Instructions for further details and recommendations.**

- The hardware to attach the auger ground stakes 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.



# OWNER'S MANUAL - PARTS IDENTIFICATION

WOOD COMPONENTS (NOT TO SCALE)



**B01 FRONT POST - W4L17942**  
(x1) 3"x3"x89 1/2" (76x76x2273)



**B02 FRONT POST - W4L17943**  
(x1) 3"x3"x89 1/2" (76x76x2273)



**B03 BACK POST - W4L17948**  
(x1) 3"x3"x86 7/16" (76x76x2196)



**B04 BACK POST - W4L17949**  
(x1) 3"x3"x86 7/16" (76x76x2196)



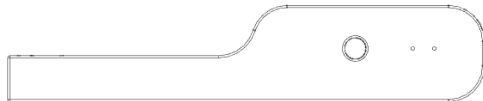
**D01 TOP RAIL - W4L17944**  
(x1) 1 7/16"x5 1/4"x74" (36x134x1880)



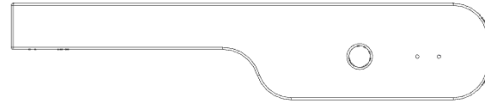
**D02 TOP RAIL END - W4L17958**  
(x1) 1 7/16"x5 1/4"x15" (36x134x381)



**D03 TOP RAIL END - W4L17959**  
(x1) 1 7/16"x5 1/4"x15" (36x134x381)



**D04 ARM REST - W4L17972**  
(x1) 1 7/16"x5 1/4"x26 1/8" (36x134x665)



**D05 ARM REST - W4L18436**  
(x1) 1 7/16"x5 1/4"x26 1/8" (36x134x665)



**E01 TOP RAIL - W4L18434**  
(x1) 1 7/16"x3 3/8"x74" (36x86x1880)



**E02 ANGLE BRACE - W4L17951**  
(x8) 1 7/16"x3 3/8"x16 15/16" (36x86x431)



**E03 ANGLE BRACE - W4L17952**  
(x4) 1 7/16"x3 3/8"x32 1/8" (36x86x816)



**E04 VERTICAL BENCH BRACE - W4L17961**  
(x2) 1 7/16"x3 3/8"x23 1/4" (36x86x590)



**E05 HORIZONTAL BENCH BRACE - W4L17962**  
(x2) 1 7/16"x3 3/8"x20 1/4" (36x86x515)



**E06 MIDDLE HORIZONTAL BRACE - W4L17974**  
(x1) 1 7/16"x3 3/8"x20 1/4" (36x86x515)



**E07 MIDDLE VERTICAL BRACE - W4L17975**  
(x1) 1 7/16"x3 3/8"x23 1/4" (36x86x590)



**E08 TOP RAIL END - W4L18435**  
(x1) 1 7/16"x3 3/8"x15" (36x86x381)



**E09 TOP RAIL END - W4L17950**  
(x1) 1 7/16"x3 3/8"x15" (36x86x381)

# OWNER'S MANUAL - PARTS IDENTIFICATION

WOOD COMPONENTS (NOT TO SCALE)



G01 SIDE TOP RAIL - W4L17945  
(x2) 15/16"x5 1/4"x44 1/2" (24x134x1130)



G02 GROUND RAIL - W4L17947  
(x2) 15/16"x5 1/4"x65 3/16" (24x134x1655)



G03 GROUND RAIL - W4L17953  
(x1) 15/16"x5 1/4"x74" (24x134x1880)



H01 SIDE MID RAIL - W4L17946  
(x2) 15/16"x3 3/8"x44 1/2" (24x86x1130)



H02 RAFTER - W4L17955  
(x2) 15/16"x3 3/8"x55 1/8" (24x86x1400)



H03 RAFTER - W4L17956  
(x5) 15/16"x3 3/8"x55 1/8" (24x86x1400)



H04 VERTICAL BACKER BOARD - W4L17963  
(x4) 15/16"x3 3/8"x50" (24x86x1270)



H05 VERTICAL BACKER BOARD - W4L17964  
(x4) 15/16"x3 3/8"x47 3/16" (24x86x1198)



J01 SLAT - W4L17973  
(x2) 15/16"x1 15/16"x47 3/16" (24x50x1198)



N01 PURLIN - W4L17960  
(x18) 5/8"x2 3/8"x49 1/2" (16x60x1257)



Q01 SHELF - W4L17954  
(x2) 15/16"x5 1/4"x38 7/16" (24x134x977)



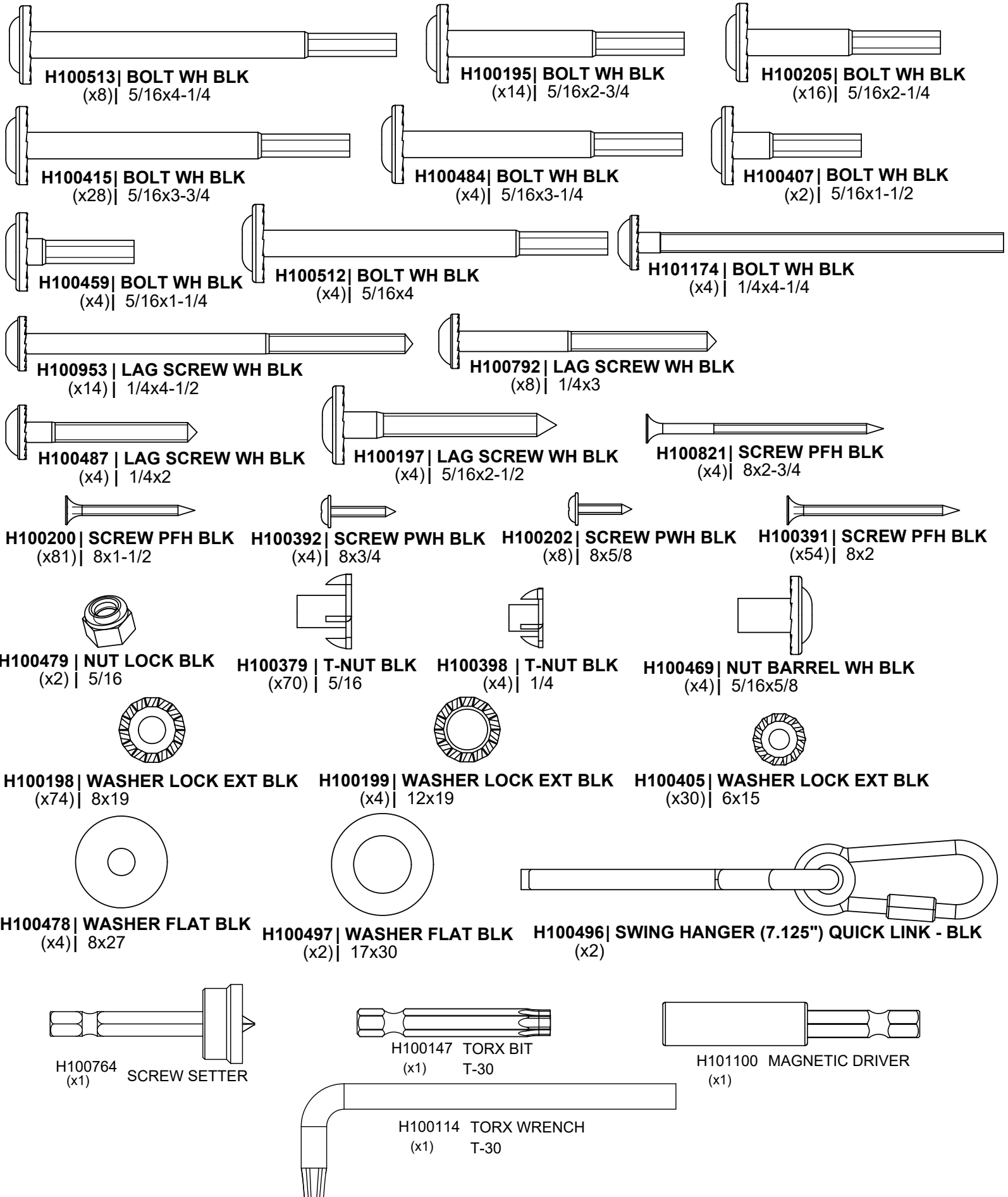
W01 SWING RAFTER - W4L17957  
(x2) 1 15/16"x3 3/8"x55 1/8" (50x86x1400)



W02 ARM REST POST - W4L17965  
(x2) 1 15/16"x3"x13" (50x76x330)

# OWNER'S MANUAL - PARTS IDENTIFICATION

## HARDWARE COMPONENTS (NOT TO SCALE)

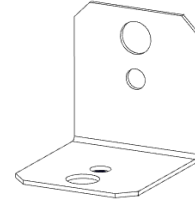


# OWNER'S MANUAL - PARTS IDENTIFICATION

## ACCESSORY COMPONENTS (NOT TO SCALE)



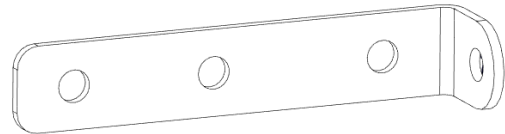
A100178 AUGER GROUND STAKE BROWN  
(x4)



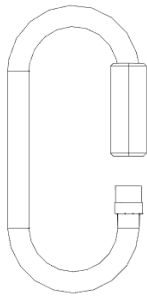
A4M00555 L BRACKET BLK  
(x4)



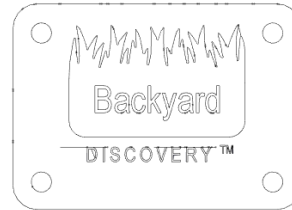
A4M00631 TIE STRAP PLATE - BLK  
(x2)



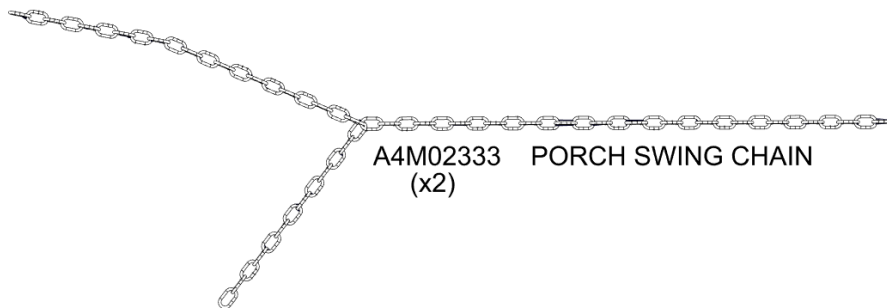
A4M00632 CHAIN SUPPORT BRACKET  
(x2)



A4M00633 QUICK LINK  
(x4)



A4M02158 BYD ID TAG PATIO  
(x1)



A4M02333 PORCH SWING CHAIN  
(x2)

# PRE-ASSEMBLY STEP 1 - SORTING PARTS

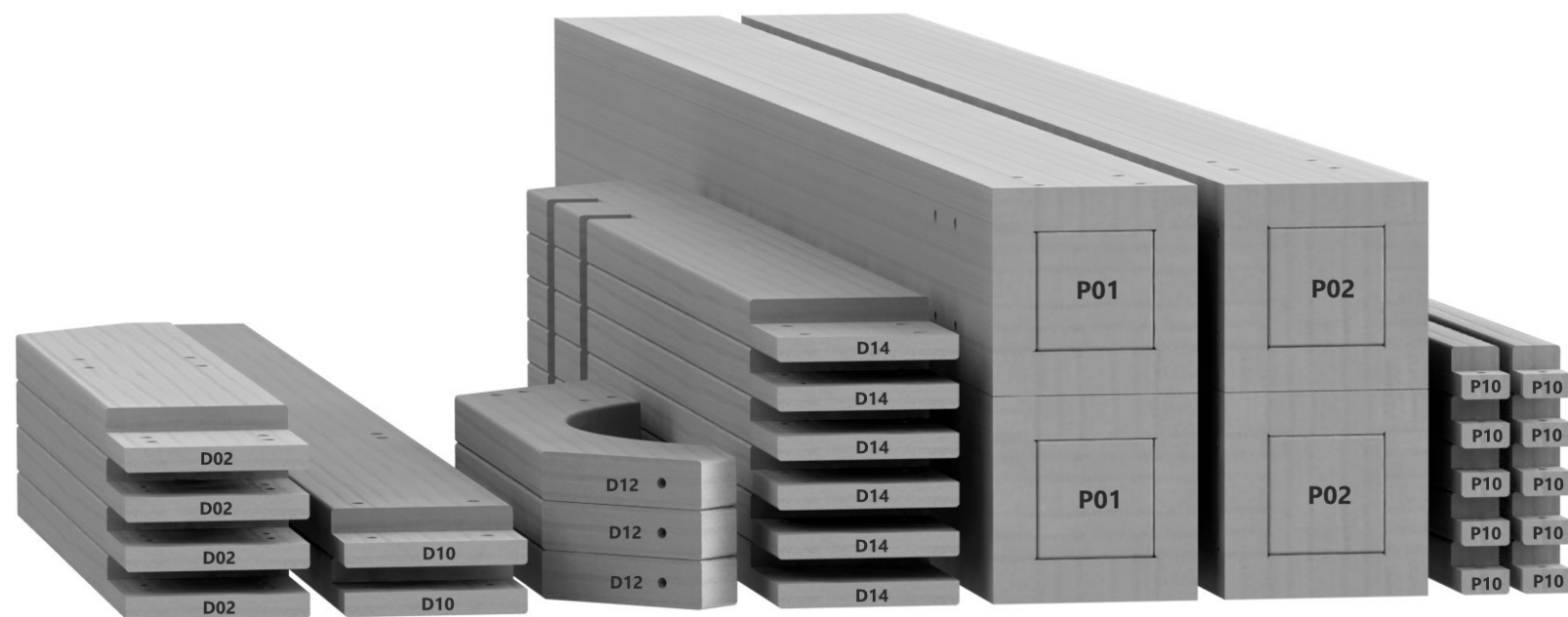
It is critical for ease of assembly that you take the time to sort and organize the wood and hardware.

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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.

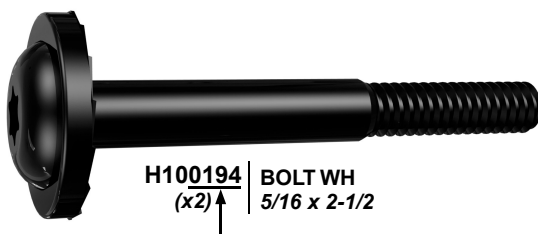
**NOTE: CARTONS ARE NOT ORGANIZED BY BOARD NUMBER.**



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## 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



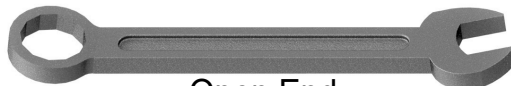
Cordless Drill  
or Electric Drill



Drill  
Attachments:  
Phillips Head



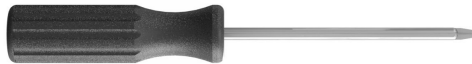
1/8", 3/16", 3/8" &  
7/16" Drill Bits



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



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



Phillips Screw Driver



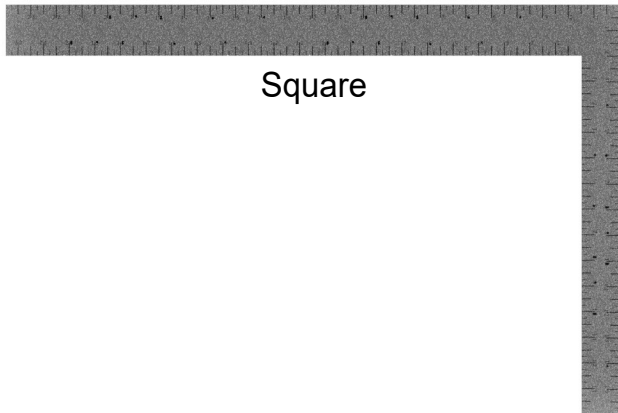
Claw Hammer



Rubber Mallet  
- Optional



Tape Measure



Square




Level 24"

# 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)



**BILT.**

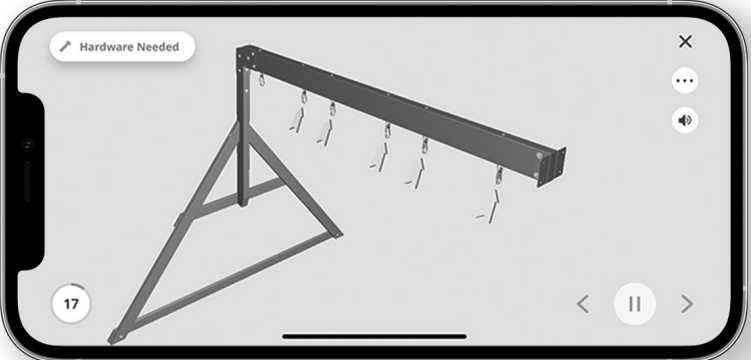
Scan for easy  
**3D instructions**

Download the BILT app  
before you begin



Download on the  
App Store

GET IT ON  
Google Play



Hardware Needed

17

3D assembly instructions on a smartphone screen showing a metal frame structure.

# STEP 4 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
12	H100198	WASHER LOCK EXT 8X19 BLK
12	H100379	T-NUT 5/16 BLK
12	H100415	BOLT WH 5/16 X 3 3/4



B02 FRONT POST - W4L17943  
(x1) 3"x3"x89 1/2" (76x76x2273)



B03 BACK POST - W4L17948  
(x1) 3"x3"x86 7/16" (76x76x2196)



G01 SIDE TOP RAIL - W4L17945  
(x1) 15/16"x5 1/4"x44 1/2" (24x134x1130)



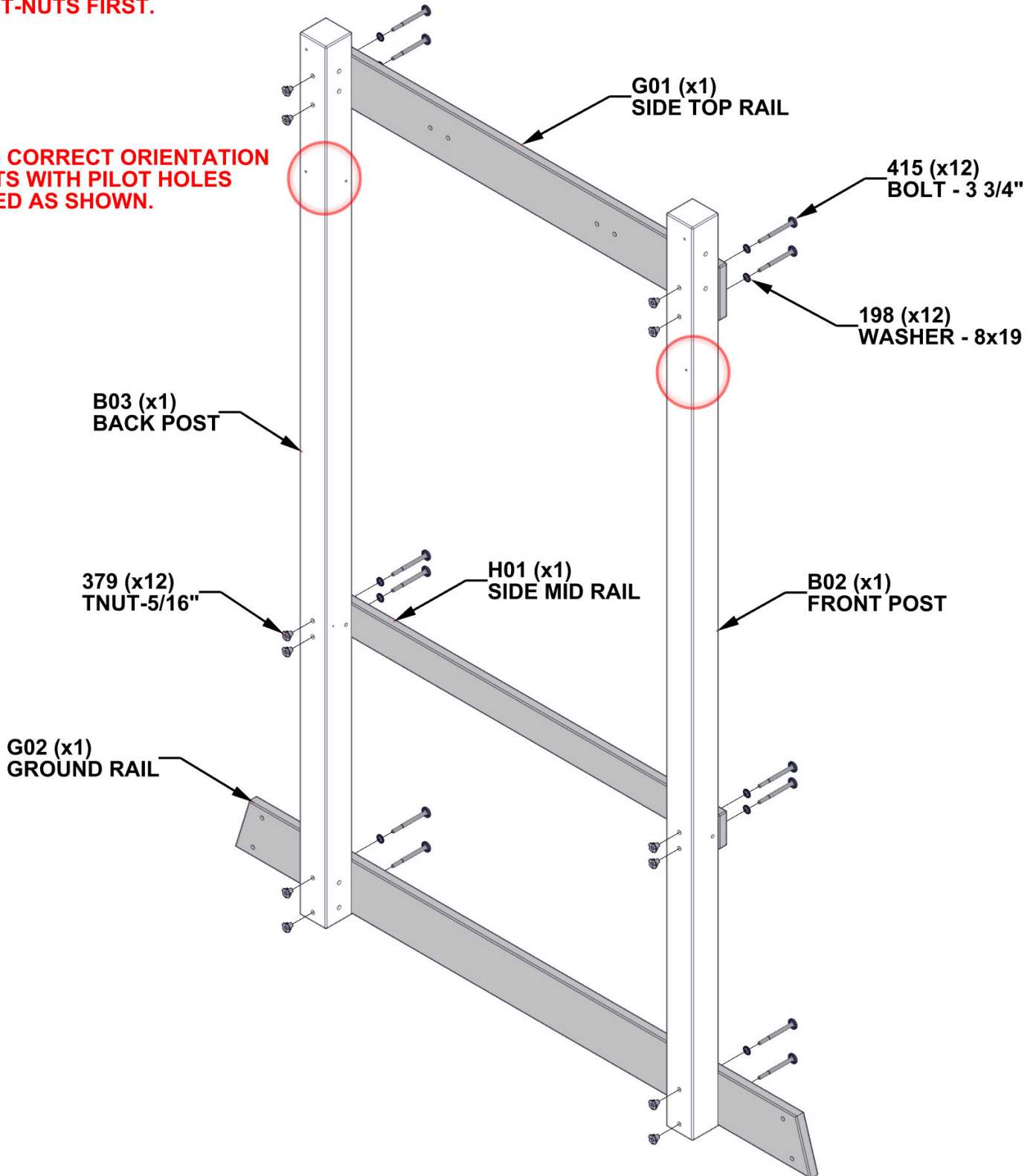
G02 GROUND RAIL - W4L17947  
(x1) 15/16"x5 1/4"x65 3/16" (24x134x1655)



H01 SIDE MID RAIL - W4L17946  
(x1) 15/16"x3 3/8"x44 1/2" (24x86x1130)

**INSERT T-NUTS FIRST.**

**ENSURE CORRECT ORIENTATION OF POSTS WITH PILOT HOLES ORIENTED AS SHOWN.**



# STEP 5 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
12	H100198	WASHER LOCK EXT 8X19 BLK
12	H100379	T-NUT 5/16 BLK
12	H100415	BOLT WH 5/16 X 3 3/4



B01 FRONT POST - W4L17942  
(x1) 3"x3"x89 1/2" (76x76x2273)



B04 BACK POST - W4L17949  
(x1) 3"x3"x86 7/16" (76x76x2196)



G01 SIDE TOP RAIL - W4L17945  
(x1) 15/16"x5 1/4"x44 1/2" (24x134x1130)

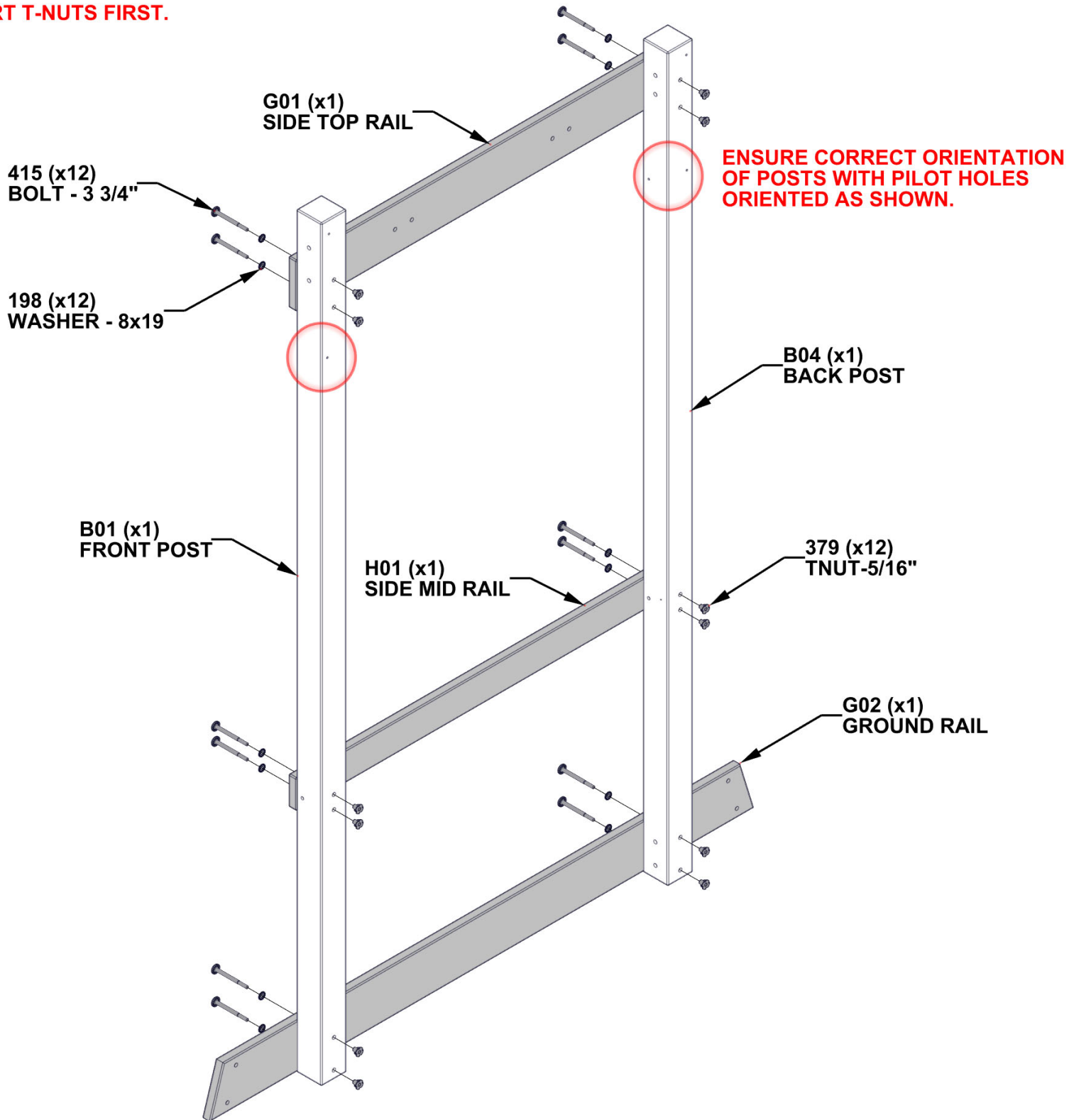


G02 GROUND RAIL - W4L17947  
(x1) 15/16"x5 1/4"x65 3/16" (24x134x1655)



H01 SIDE MID RAIL - W4L17946  
(x1) 15/16"x3 3/8"x44 1/2" (24x86x1130)

## INSERT T-NUTS FIRST.



# STEP 6 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
4	H100198	WASHER LOCK EXT 8X19 BLK
4	H100379	T-NUT 5/16 BLK
4	H100513	BOLT WH 5/16 X 4 1/4 BLK



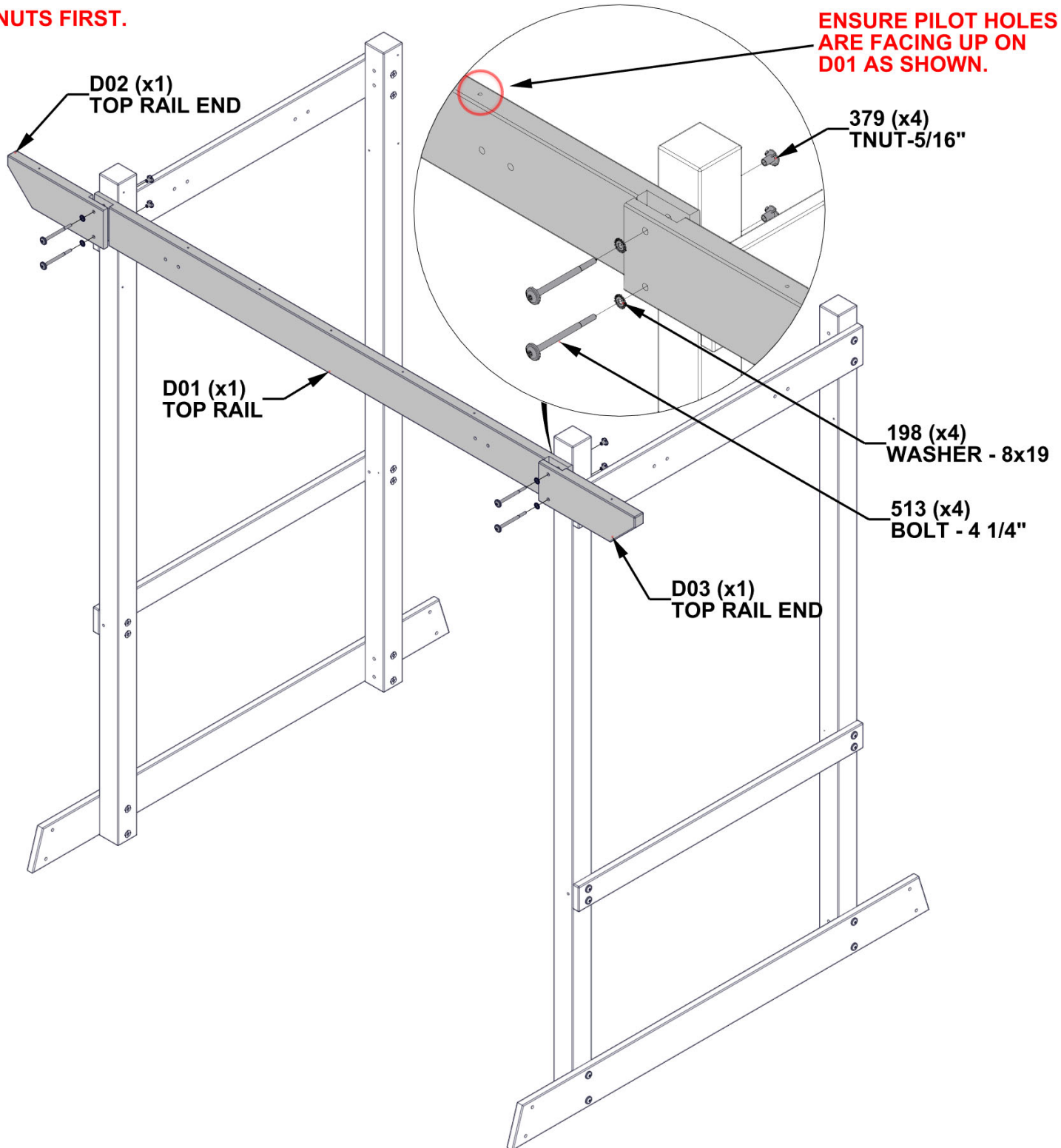
D02 TOP RAIL END - W4L17958  
(x1) 1 7/16"x5 1/4"x15" (36x134x381)

D03 TOP RAIL END - W4L17959  
(x1) 1 7/16"x5 1/4"x15" (36x134x381)



D01 TOP RAIL - W4L17944  
(x1) 1 7/16"x5 1/4"x74" (36x134x1880)

**INSERT T-NUTS FIRST.**



# STEP 7 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
4	H100198	WASHER LOCK EXT 8X19 BLK
4	H100379	T-NUT 5/16 BLK
4	H100513	BOLT WH 5/16 X 4 1/4 BLK



E01 TOP RAIL - W4L18434  
(x1) 1 7/16"x3 3/8"x74" (36x86x1880)

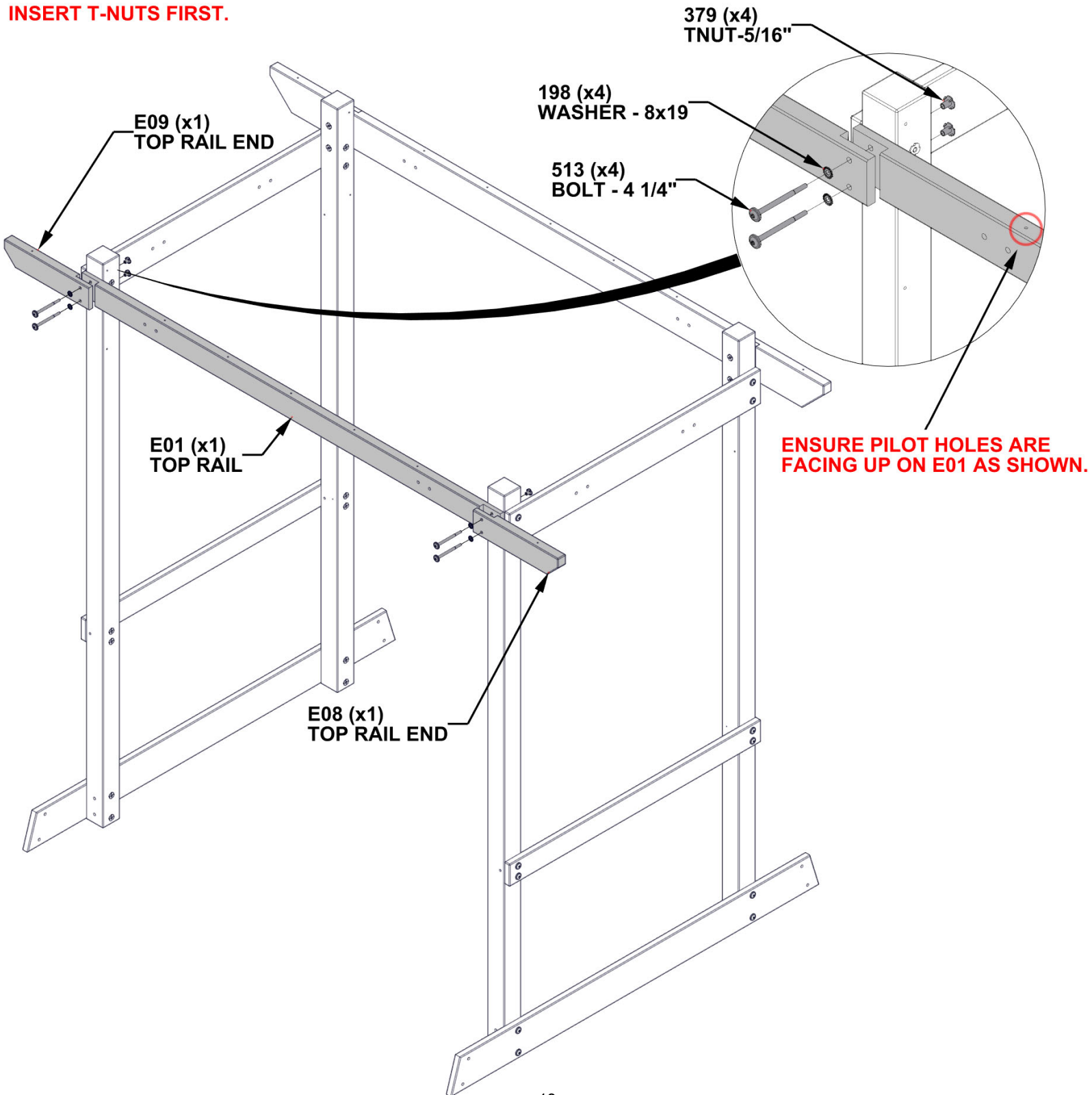


E08 TOP RAIL END - W4L18435  
(x1) 1 7/16"x3 3/8"x15" (36x86x381)



E09 TOP RAIL END - W4L17950  
(x1) 1 7/16"x3 3/8"x15" (36x86x381)

**INSERT T-NUTS FIRST.**



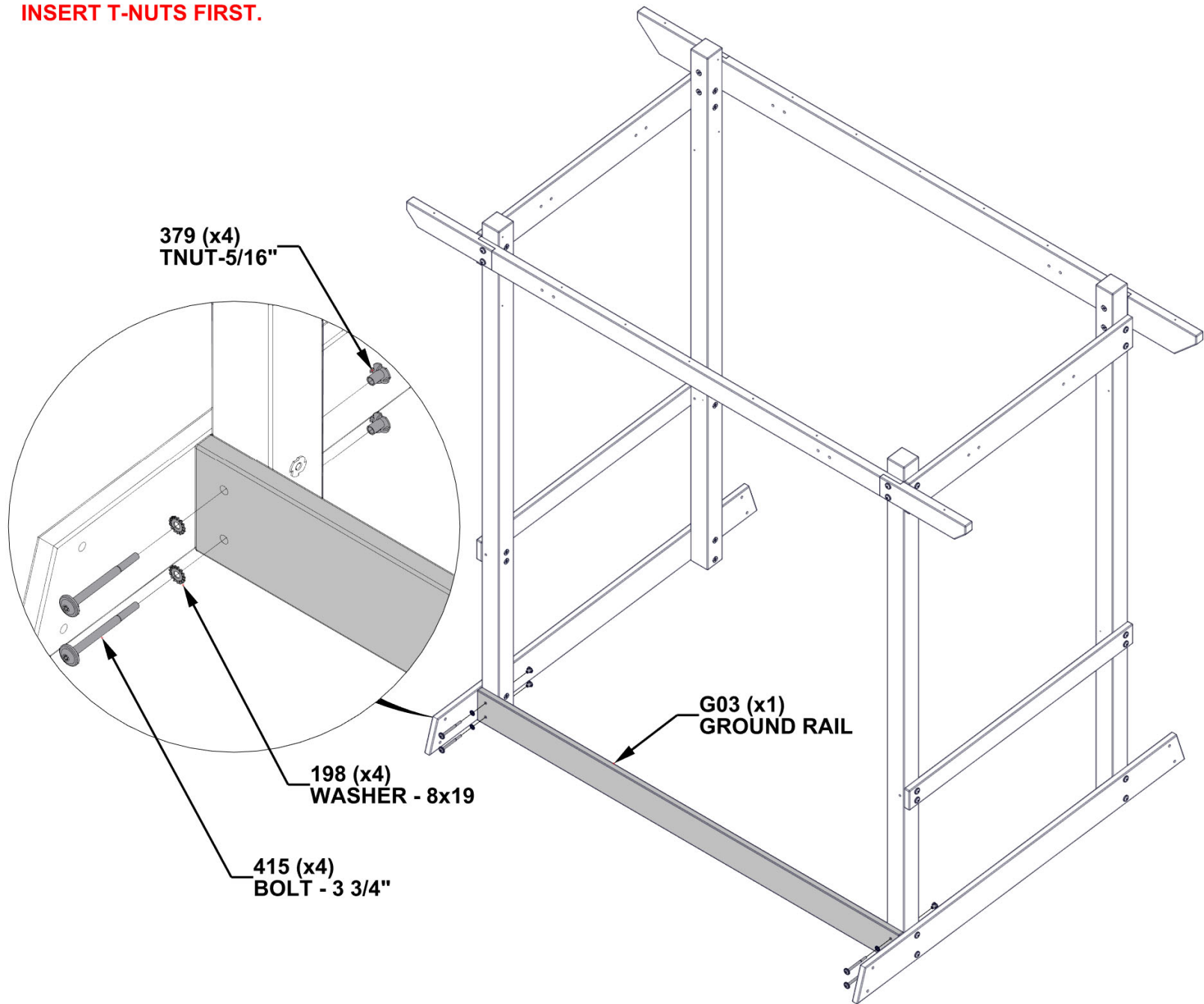
# STEP 8 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
4	H100198	WASHER LOCK EXT 8X19 BLK
4	H100379	T-NUT 5/16 BLK
4	H100415	BOLT WH 5/16 X 3 3/4



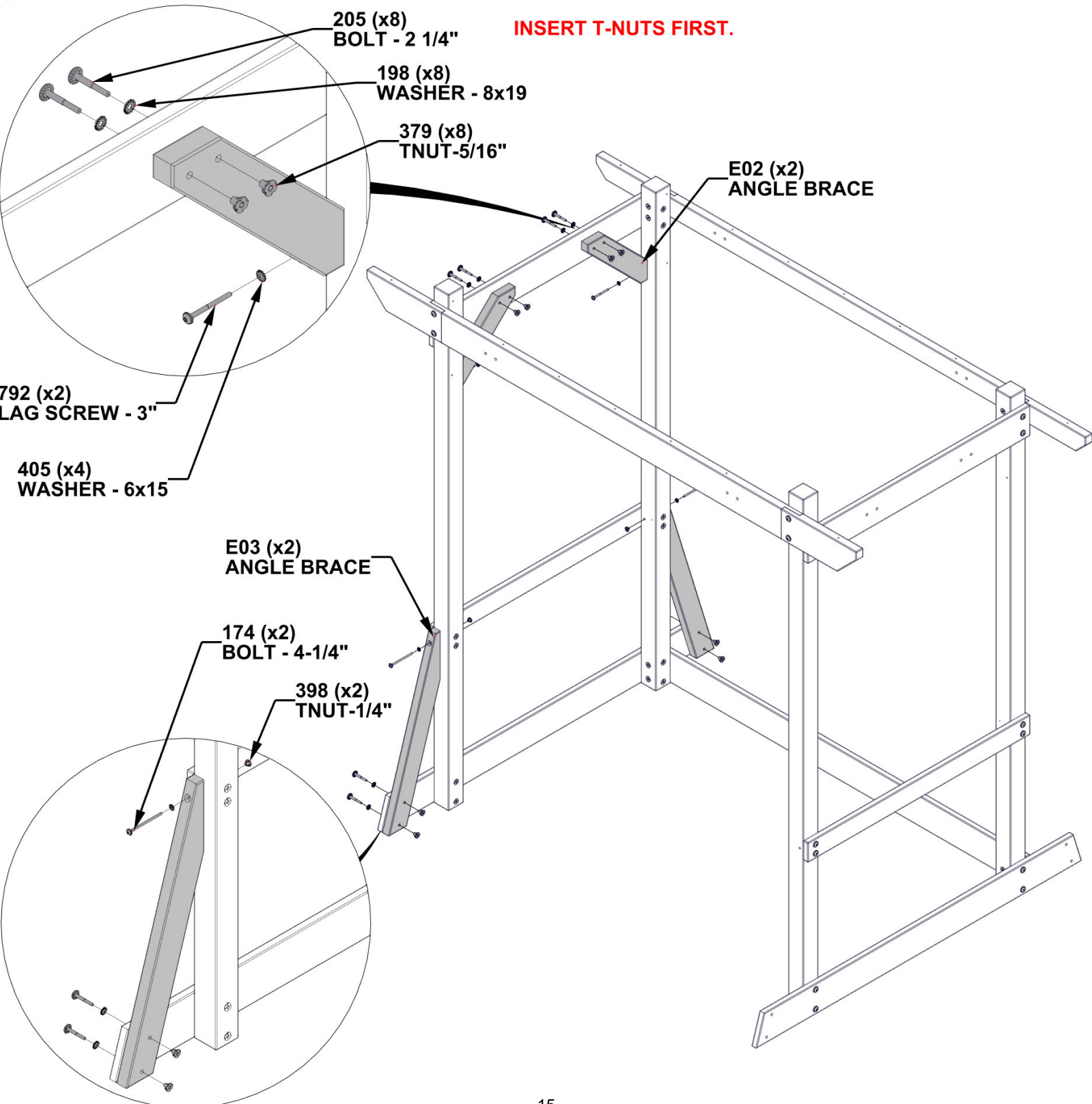
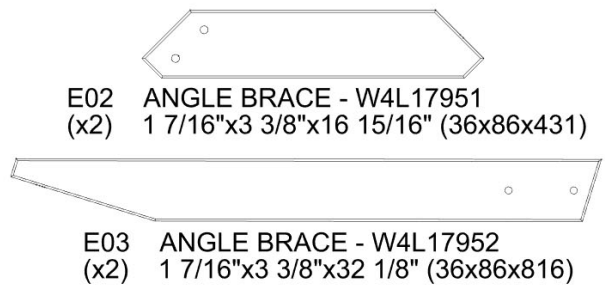
G03 GROUND RAIL - W4L17953  
(x1) 15/16"x5 1/4"x74" (24x134x1880)

**INSERT T-NUTS FIRST.**



# STEP 9 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
8	H100198	WASHER LOCK EXT 8X19 BLK
8	H100205	BOLT WH 5/16 X 2 1/4 BLK
8	H100379	T-NUT 5/16 BLK
2	H100398	T-NUT 1/4 BLK
4	H100405	WASHER LOCK EXT 6X15 BLK
2	H100792	LAG SCREW WH 1/4 X 3 BLK
2	H101174	BOLT WH 1/4 X 4 1/4 BLK



# STEP 10 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
8	H100198	WASHER LOCK EXT 8X19 BLK
8	H100205	BOLT WH 5/16 X 2 1/4 BLK
8	H100379	T-NUT 5/16 BLK
2	H100398	T-NUT 1/4 BLK
4	H100405	WASHER LOCK EXT 6X15 BLK
2	H100792	LAG SCREW WH 1/4 X 3 BLK
2	H101174	BOLT WH 1/4 X 4 1/4 BLK

E02 ANGLE BRACE - W4L17951  
(x2) 1 7/16"x3 3/8"x16 15/16" (36x86x431)



E03 ANGLE BRACE - W4L17952  
(x2) 1 7/16"x3 3/8"x32 1/8" (36x86x816)

**INSERT T-NUTS FIRST.**

205 (x8)  
BOLT - 2 1/4"

198 (x8)  
WASHER - 8x19

379 (x8)  
TNUT-5/16"

E02 (x2)  
ANGLE BRACE

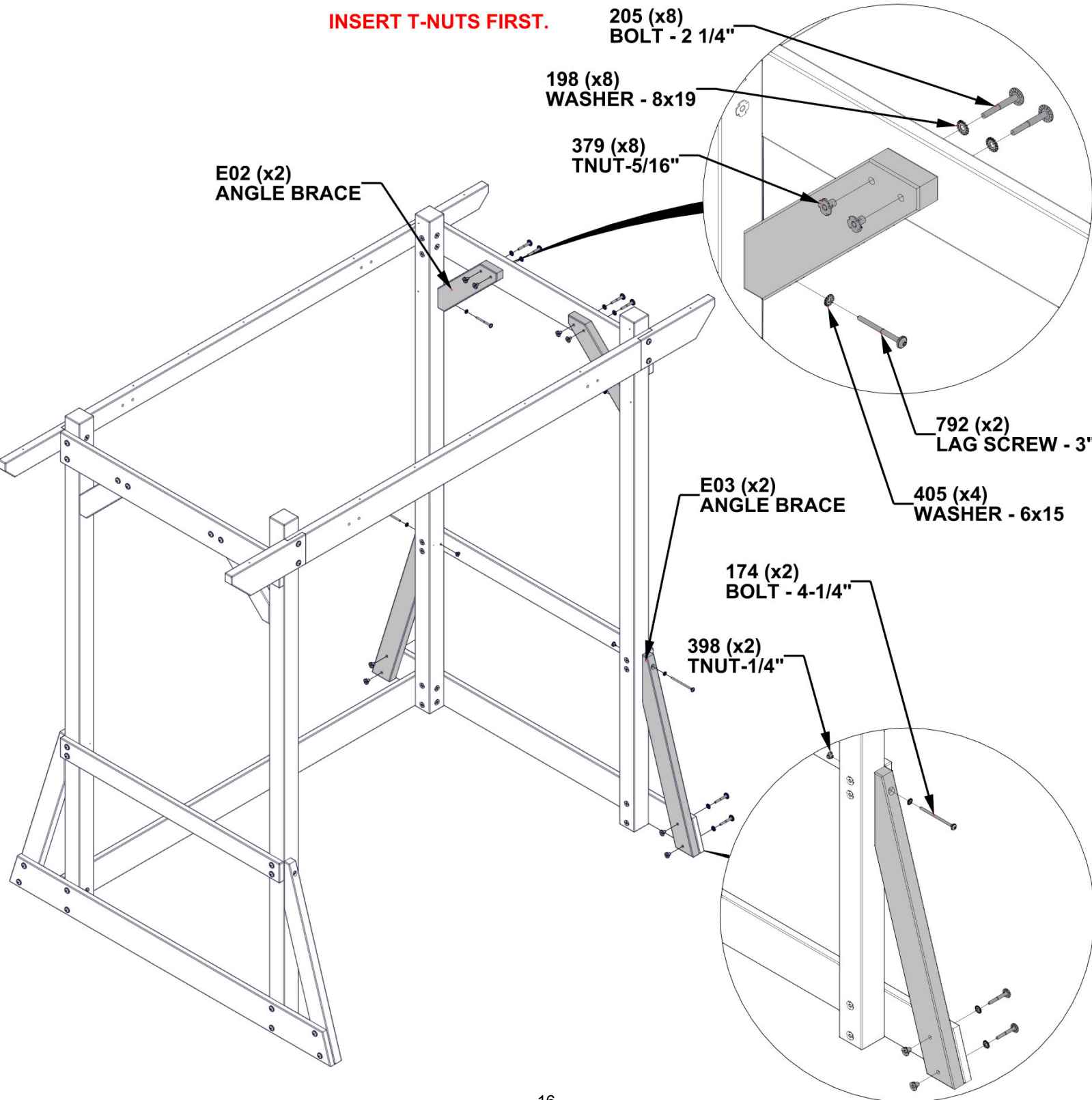
792 (x2)  
LAG SCREW - 3"

405 (x4)  
WASHER - 6x15

E03 (x2)  
ANGLE BRACE

174 (x2)  
BOLT - 4-1/4"

398 (x2)  
TNUT-1/4"



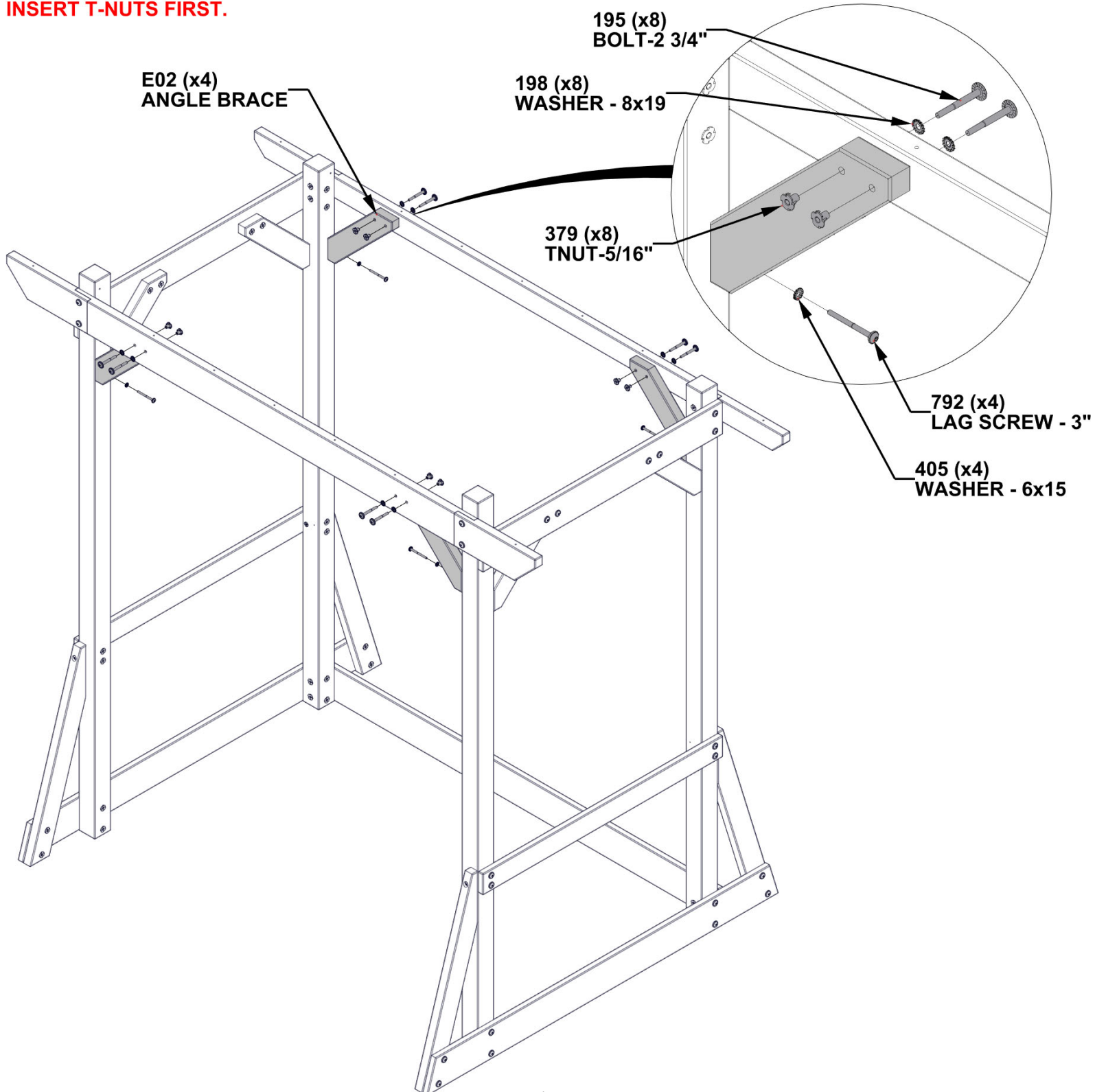
# STEP 11 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
8	H100195	BOLT WH 5/16 X 2 3/4 BLK
8	H100198	WASHER LOCK EXT 8X19 BLK
8	H100379	T-NUT 5/16 BLK
4	H100405	WASHER LOCK EXT 6X15 BLK
4	H100792	LAG SCREW WH 1/4 X 3 BLK



E02 ANGLE BRACE - W4L17951  
(x4) 1 7/16"x3 3/8"x16 15/16" (36x86x431)

**INSERT T-NUTS FIRST.**



# STEP 12 - PERGOLA ASSEMBLY

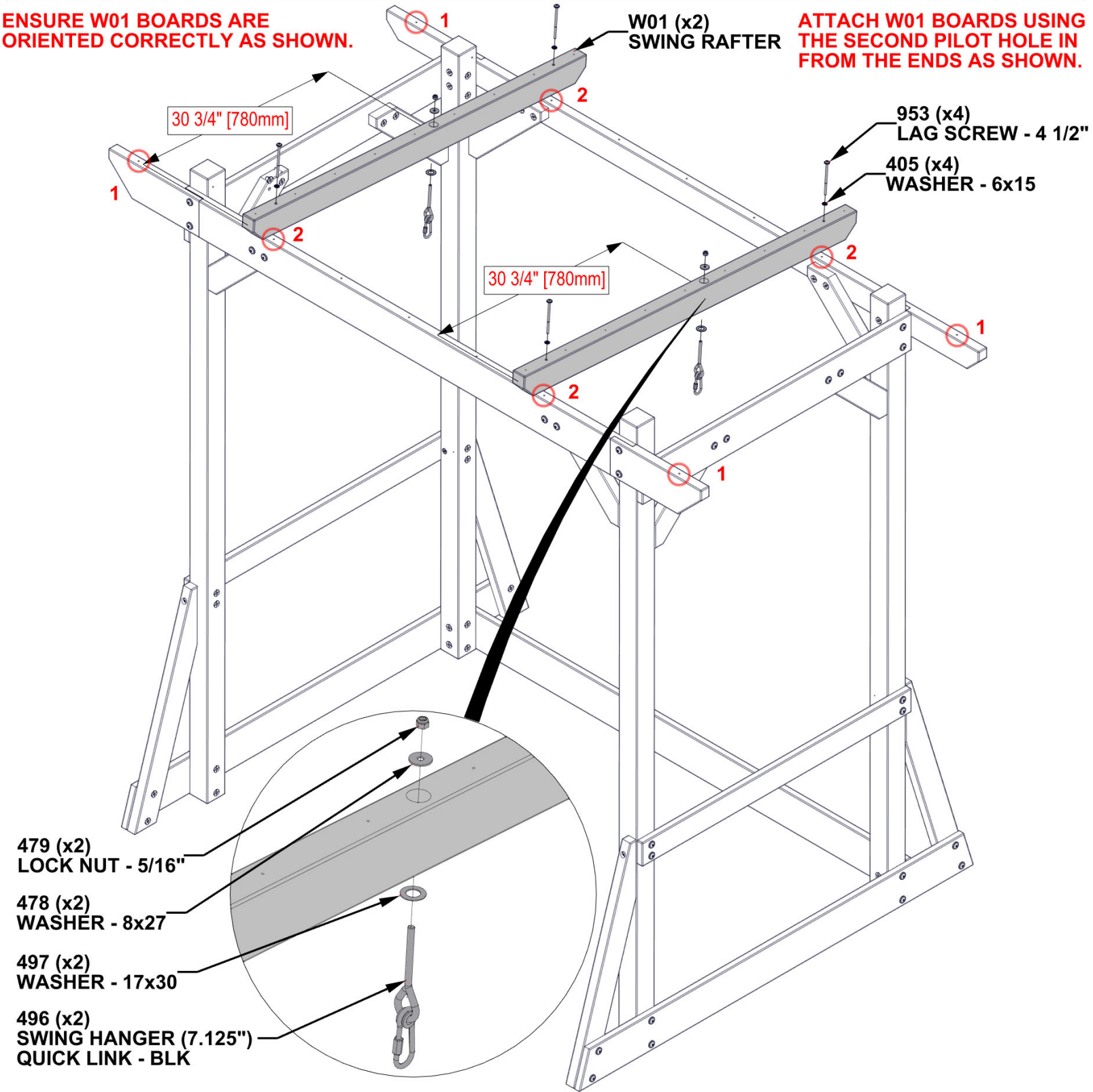
QTY	PART NUMBER	DESCRIPTION
4	H100405	WASHER LOCK EXT 6X15 BLK
2	H100478	WASHER FLAT 8X27 BLK
2	H100479	NUT LOCK 5/16 BLK
2	H100496	SWING HANGER (7.125") QUICK LINK - BLK
2	H100497	WASHER FLAT 17X30 BLK
4	H100953	LAG SCREW WH 1/4 X 4 1/2 BLK

W01 SWING RAFTER - W4L17957  
 (x2) 1 15/16"x3 3/8"x55 1/8" (50x86x1400)



**ENSURE W01 BOARDS ARE ORIENTED CORRECTLY AS SHOWN.**

**ATTACH W01 BOARDS USING THE SECOND PILOT HOLE IN FROM THE ENDS AS SHOWN.**



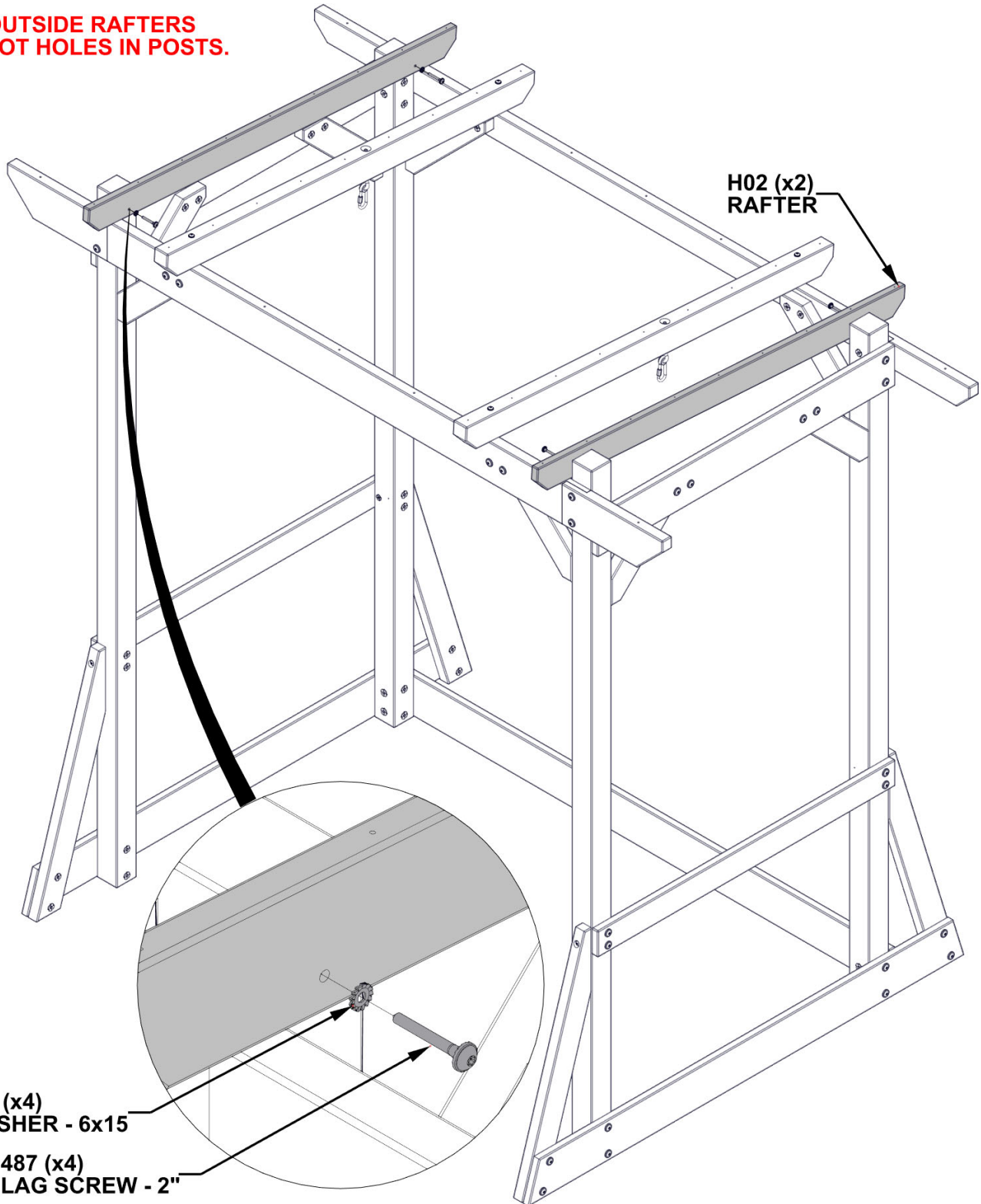
# STEP 13 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
4	H100405	WASHER LOCK EXT 6X15 BLK
4	H100487	LAG SCREW WH 1/4 X 2 BLK



H02 RAFTER - W4L17955  
(x2) 15/16"x3 3/8"x55 1/8" (24x86x1400)

**ATTACH OUTSIDE RAFTERS  
USING PILOT HOLES IN POSTS.**



H02 (x2)  
RAFTER

405 (x4)  
WASHER - 6x15

487 (x4)  
LAG SCREW - 2"

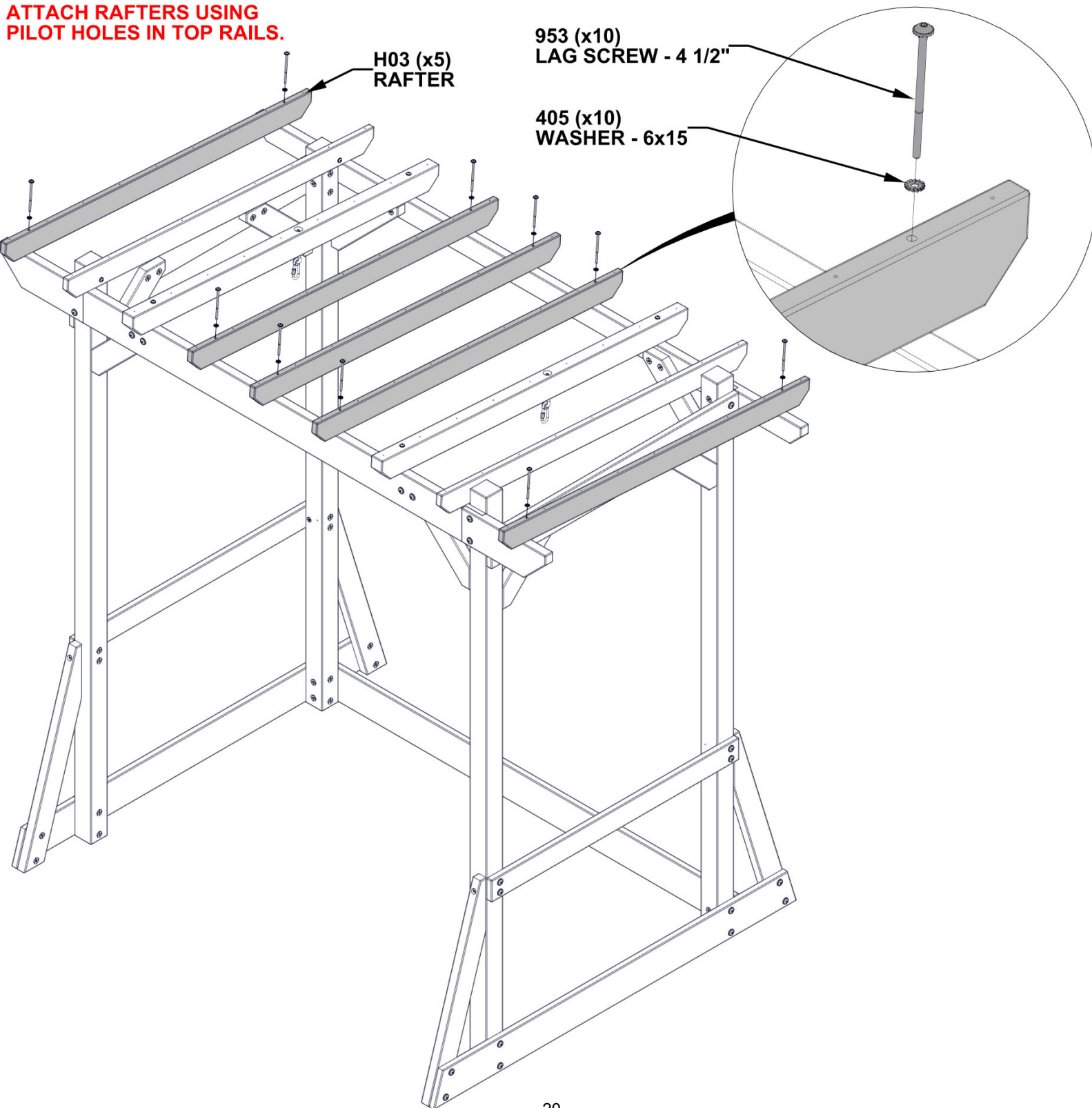
# STEP 14 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
10	H100405	WASHER LOCK EXT 6X15 BLK
10	H100953	LAG SCREW WH 1/4 X 4 1/2 BLK



H03 RAFTER - W4L17956  
(x5) 15/16"x3 3/8"x55 1/8" (24x86x1400)

**ATTACH RAFTERS USING  
PILOT HOLES IN TOP RAILS.**



# STEP 15 - PERGOLA ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
81	H100200	SCREW PFH 8 X 1 1/2 BLK

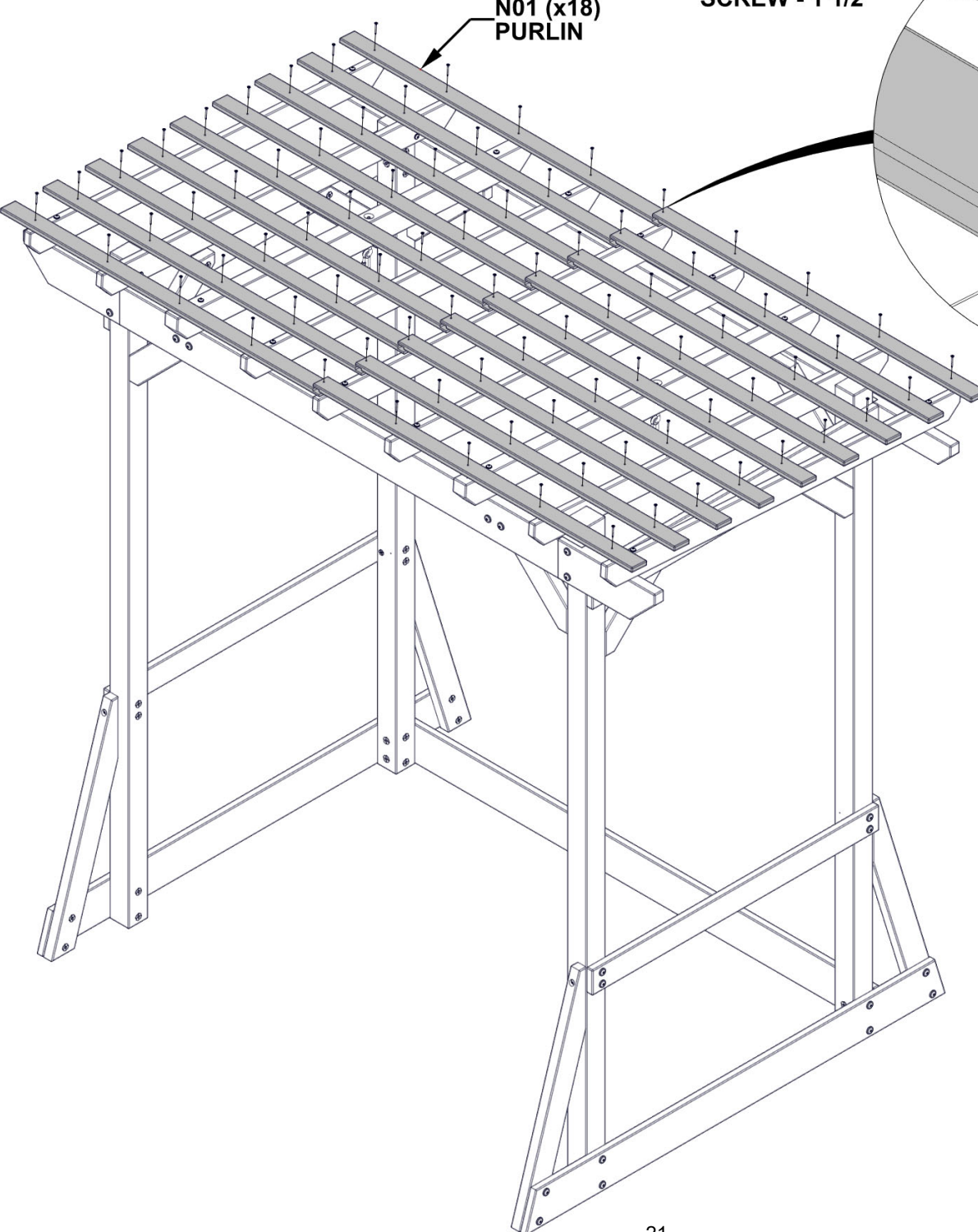
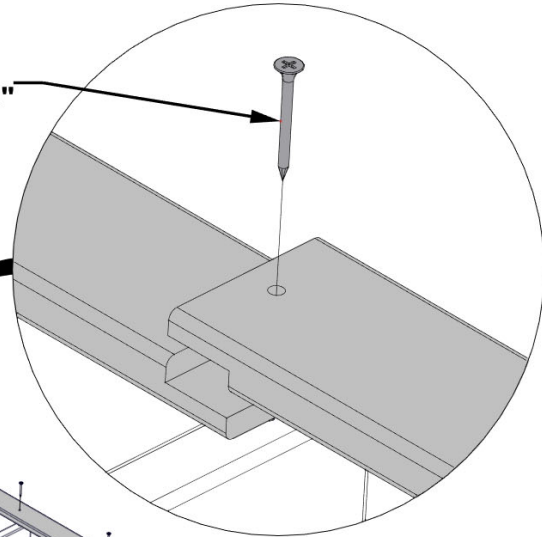


N01 PURLIN - W4L17960  
(x18) 5/8"x2 3/8"x49 1/2" (16x60x1257)

**ATTACH PURLINS USING PILOT HOLES  
IN RAFTERS. OVERLAP AS SHOWN.**

N01 (x18)  
PURLIN

200 (x81)  
SCREW - 1 1/2"

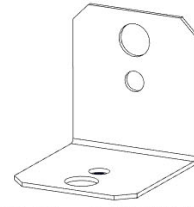


# STEP 16 - PERGOLA ASSEMBLY

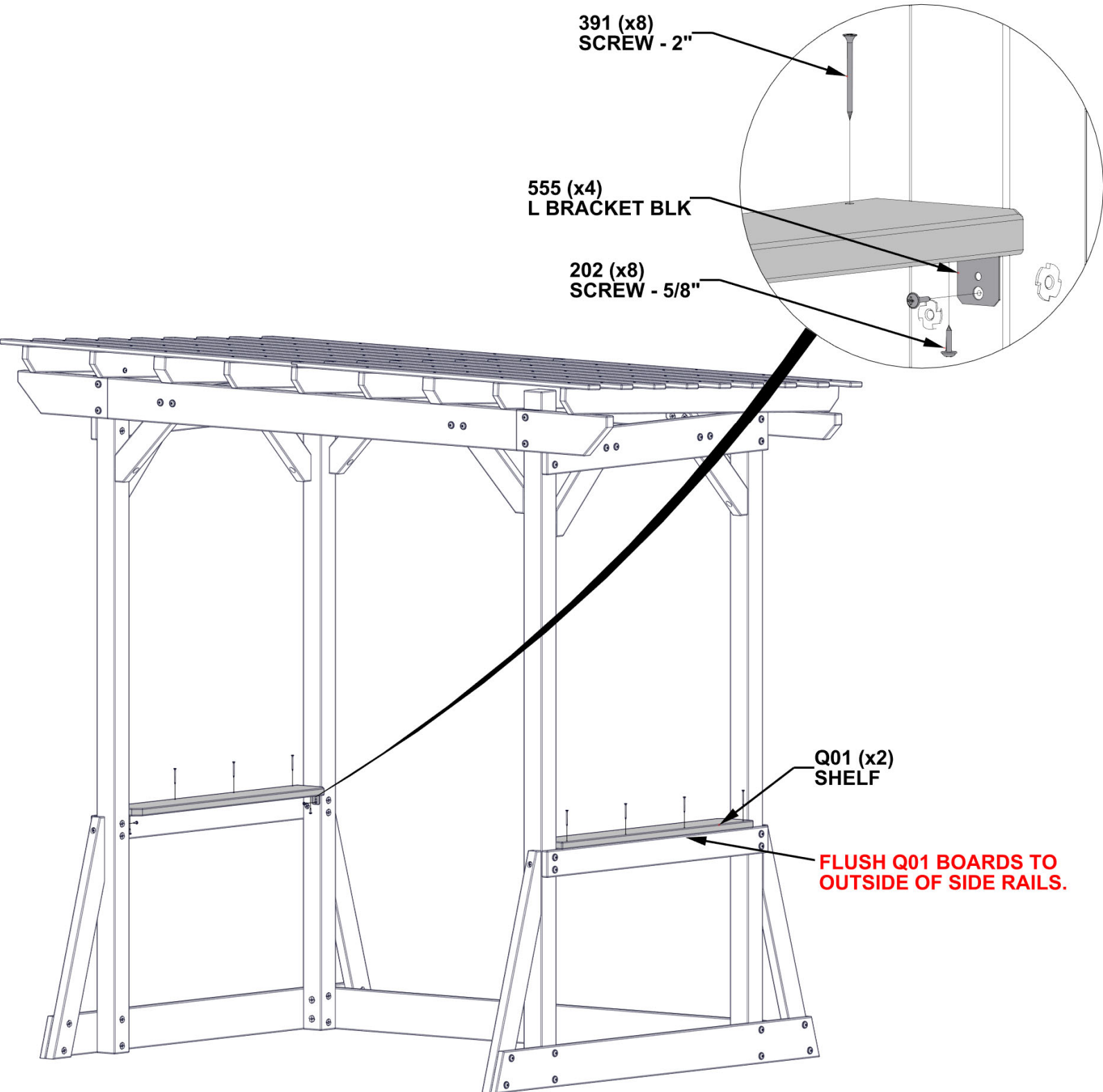
QTY	PART NUMBER	DESCRIPTION
8	H100202	SCREW PWH 8 X 5/8 BLK
8	H100391	SCREW PFH 8 X 2 BLK



Q01 SHELF - W4L17954  
(x2) 15/16"x5 1/4"x38 7/16" (24x134x977)

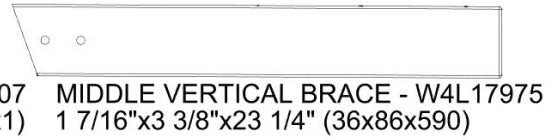
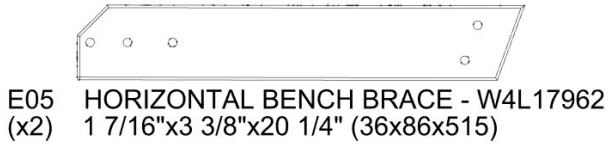


A4M00555 L BRACKET BLK  
(x4)

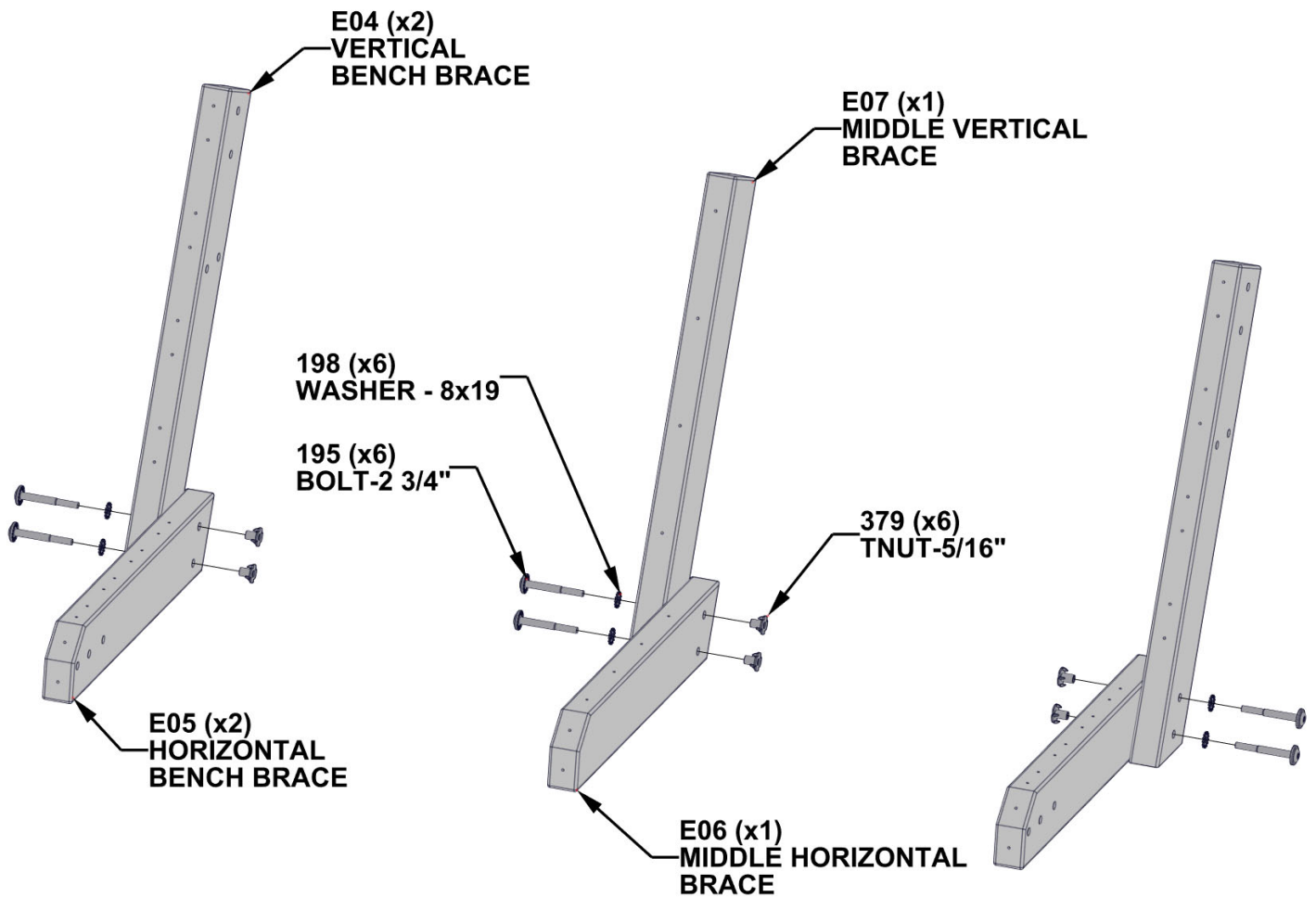


# STEP 17 - SWING ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
6	H100195	BOLT WH 5/16 X 2 3/4 BLK
6	H100198	WASHER LOCK EXT 8X19 BLK
6	H100379	T-NUT 5/16 BLK



**INSERT T-NUTS FIRST.**



**KEEP ALL BRACES ORIENTED  
AS SHOWN FOR THE NEXT STEP.**

# STEP 18 - SWING ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
46	H100391	SCREW PFH 8 X 2 BLK



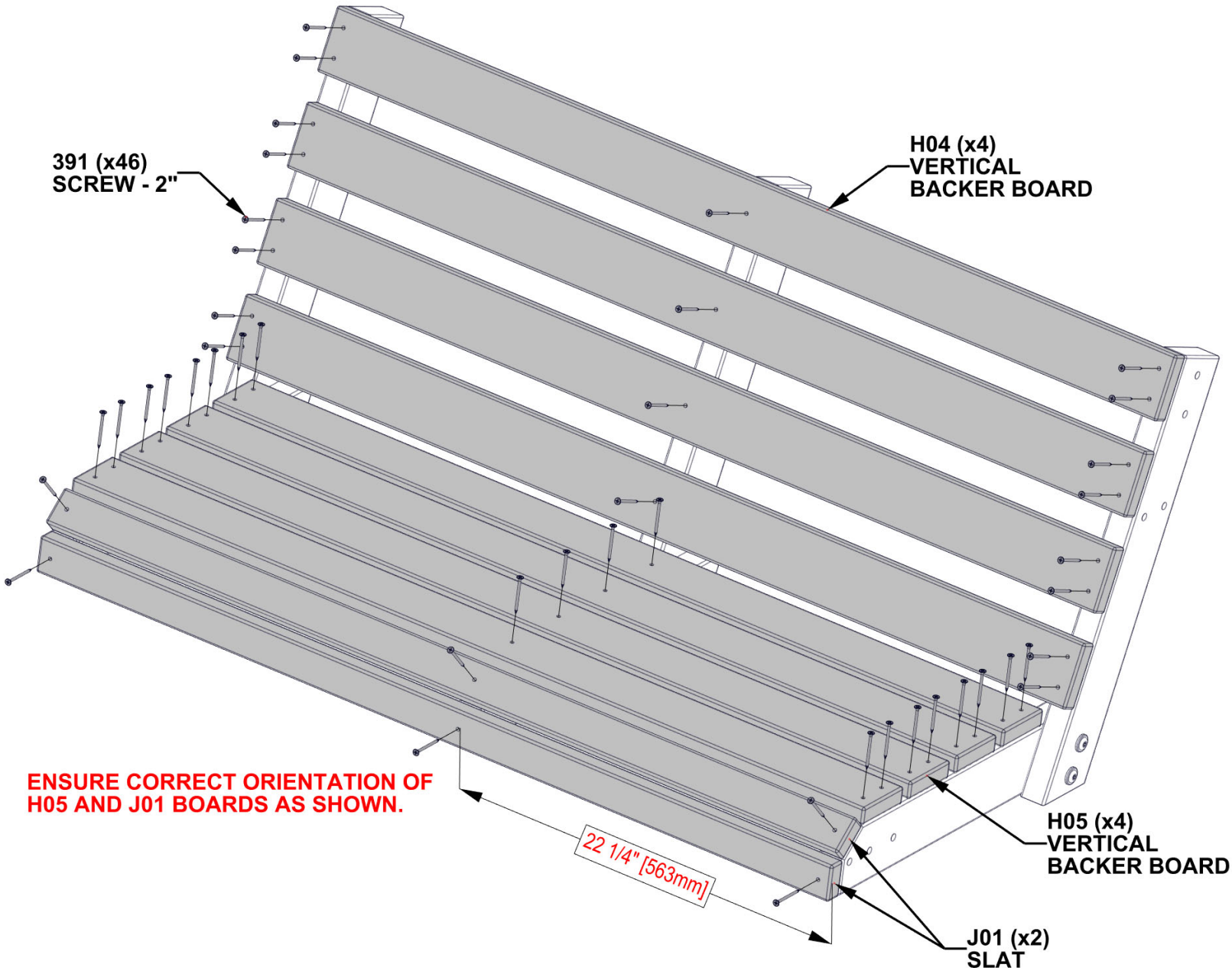
H04 VERTICAL BACKER BOARD - W4L17963  
(x4) 15/16"x3 3/8"x50" (24x86x1270)



H05 VERTICAL BACKER BOARD - W4L17964  
(x4) 15/16"x3 3/8"x47 3/16" (24x86x1198)



J01 SLAT - W4L17973  
(x2) 15/16"x1 15/16"x47 3/16" (24x50x1198)

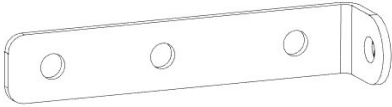


# STEP 19 - SWING ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
4	H100198	WASHER LOCK EXT 8X19 BLK
6	H100379	T-NUT 5/16 BLK
2	H100407	BOLT WH 5/16 X 1 1/2 BLK
4	H100484	BOLT WH 5/16 X 3 1/4 BLK

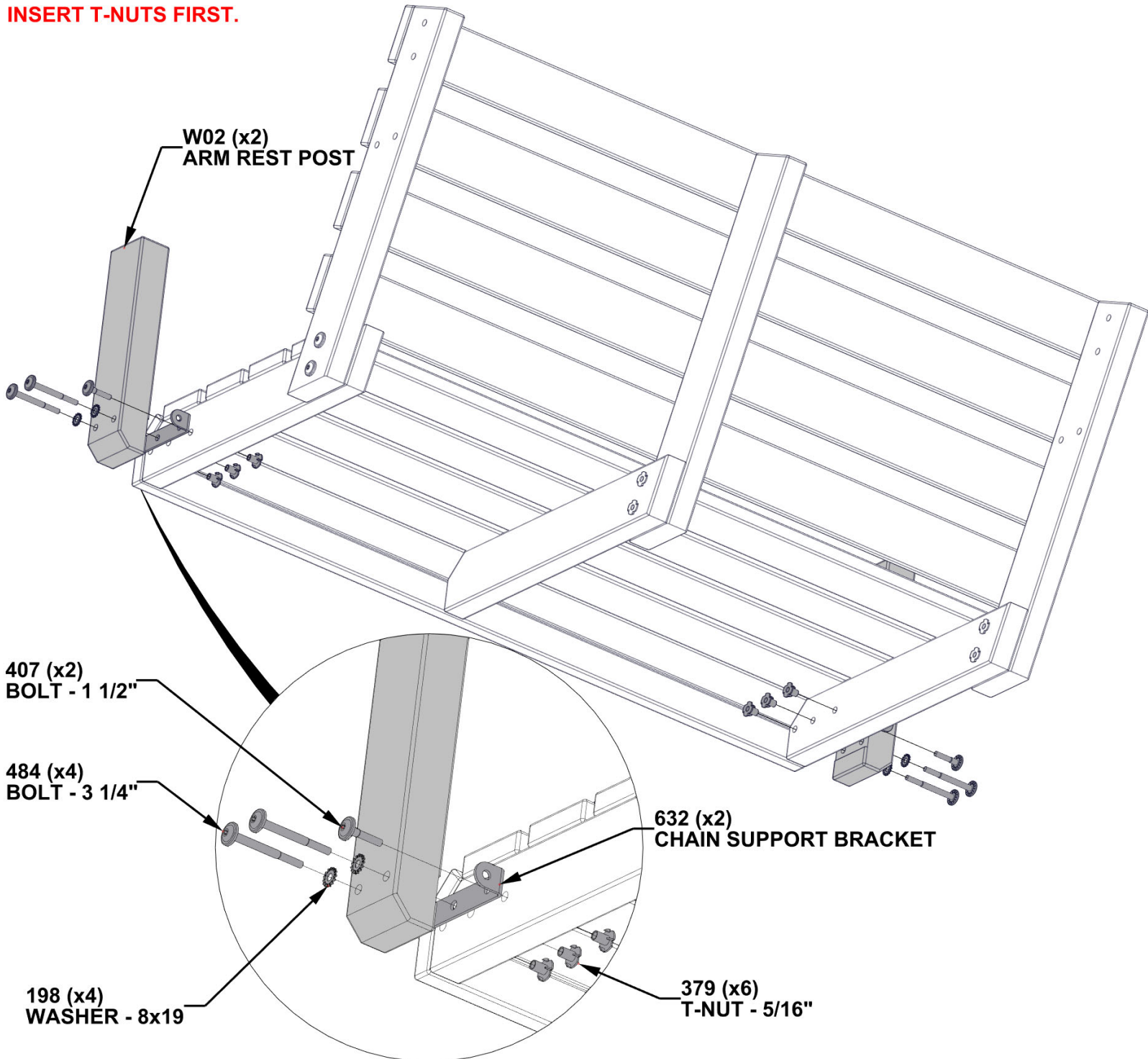


W02 ARM REST POST - W4L17965  
(x2) 1 15/16"x3"x13" (50x76x330)

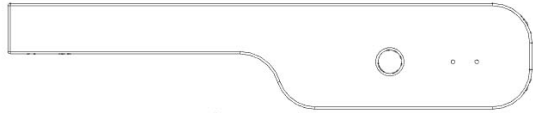


A4M00632 CHAIN SUPPORT BRACKET  
(x2)

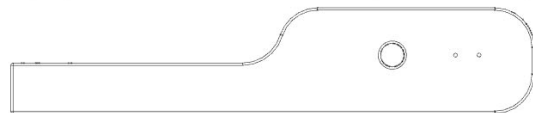
**INSERT T-NUTS FIRST.**



# STEP 20 - SWING ASSEMBLY



D04 ARM REST - W4L17972  
(x1) 1 7/16"x5 1/4"x26 1/8" (36x134x665)



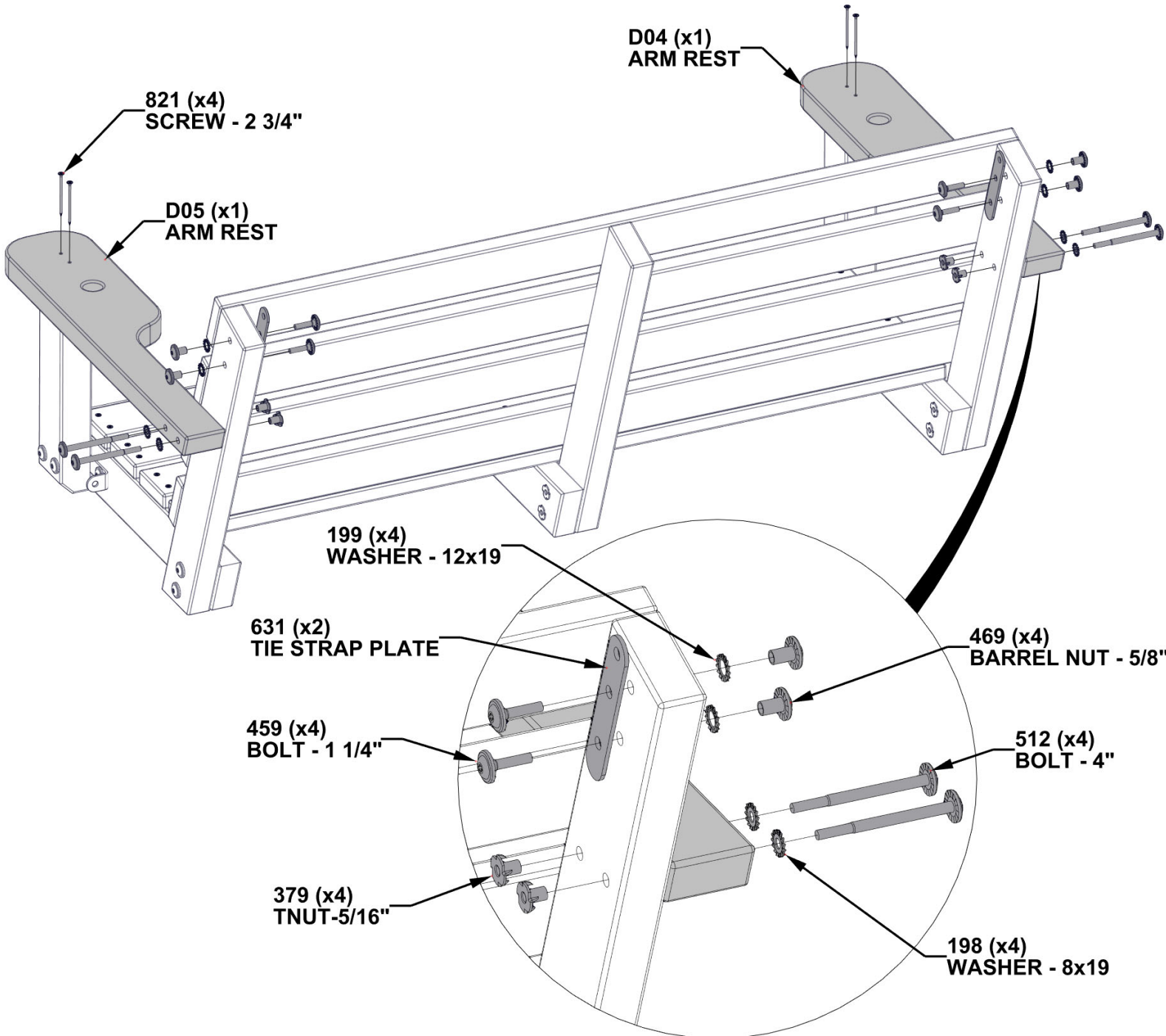
D05 ARM REST - W4L18436  
(x1) 1 7/16"x5 1/4"x26 1/8" (36x134x665)

QTY	PART NUMBER	DESCRIPTION
4	H100198	WASHER LOCK EXT 8X19 BLK
4	H100199	WASHER LOCK EXT 12X19 BLK
4	H100379	T-NUT 5/16 BLK
4	H100459	BOLT WH 5/16 X 1 1/4 BLK
4	H100469	NUT BARREL WH 5/16 X 5/8 BLK
4	H100512	BOLT WH 5/16 X 4 BLK
4	H100821	SCREW PFH 8 X 2 3/4 BLK



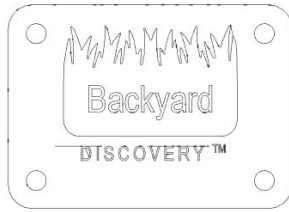
A4M00631 TIE STRAP PLATE  
(x2)

## INSERT T-NUTS FIRST.

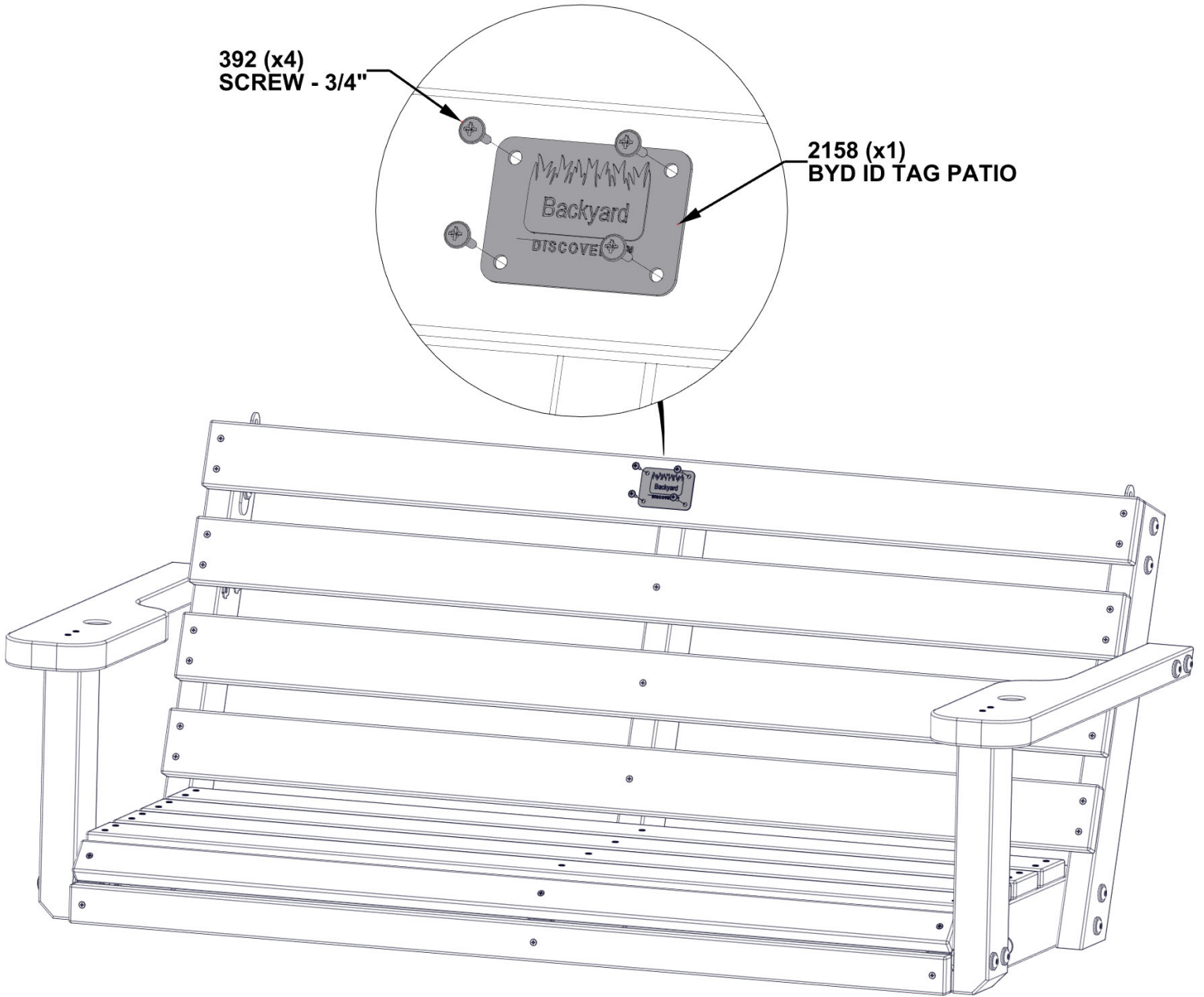


# STEP 21 - SWING ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
4	H100392	SCREW PWH 8 X 3/4 BLK



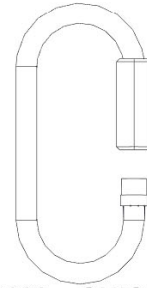
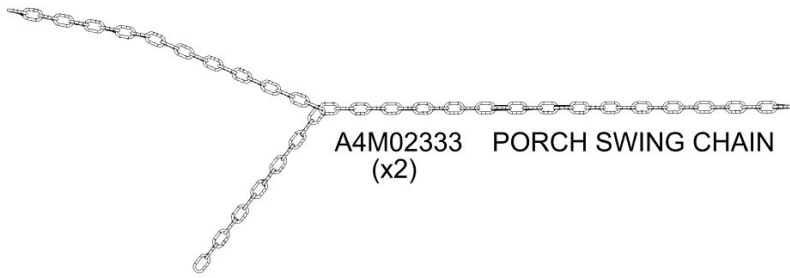
A4M02158 BYD ID TAG PATIO  
(x1)



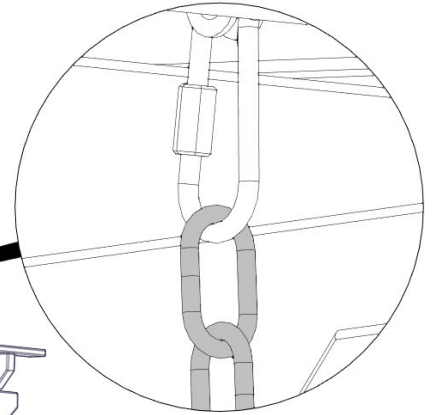
392 (x4)  
SCREW - 3/4"

2158 (x1)  
BYD ID TAG PATIO

# STEP 22 - PERGOLA SWING ASSEMBLY



**ENSURE CHAIN IS ORIENTED CORRECTLY AS SHOWN. THE MIDDLE LENGTH OF THE THREE ENDS OF THE CHAIN GOES THROUGH THE HOLE IN THE ARM REST AND ATTACHES TO THE BRACKET.**

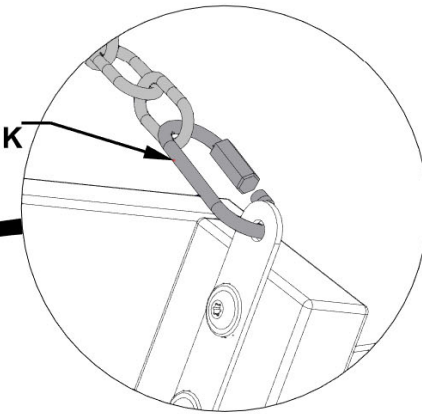


2333 (x2)  
PORCH SWING CHAIN

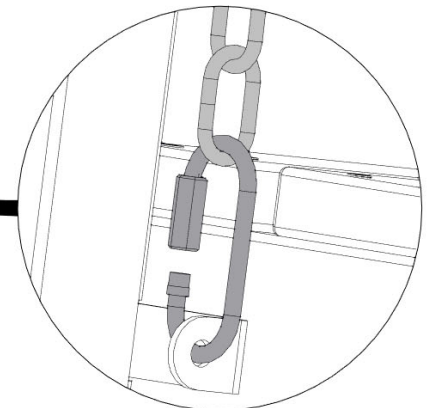
**LONGEST**

0633 (x4)  
QUICK LINK

**SHORTEST**



**ATTACH CHAIN ENDS TO QUICK LINKS, THEN TIGHTEN AND CLOSE QUICK LINKS.**



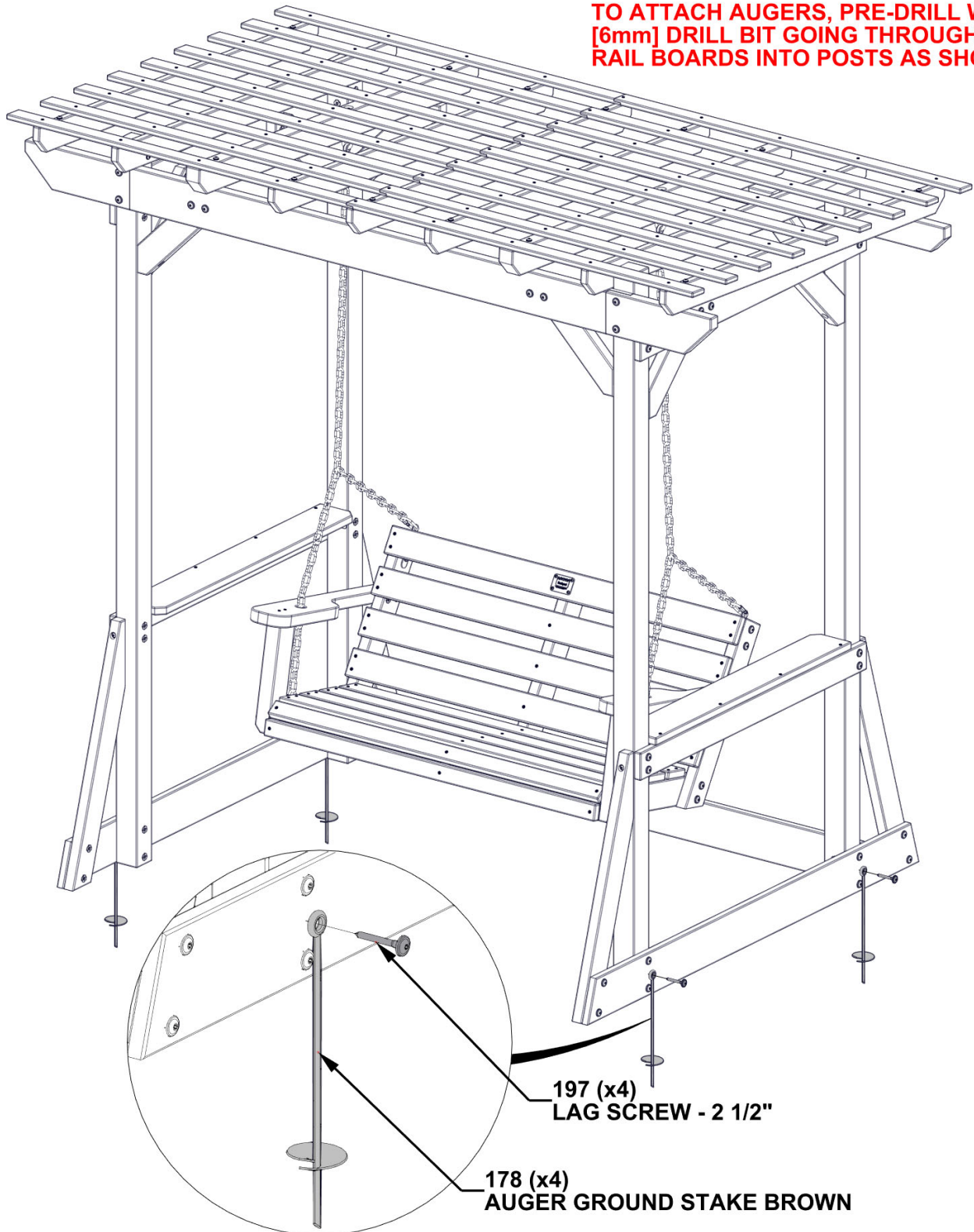
# STEP 23 - PERGOLA SWING ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
4	H100197	LAG SCREW WH 5/16 X 2 1/2 BLK



A100178 AUGER GROUND STAKE BROWN  
(x4)

**TO ATTACH AUGERS, PRE-DRILL WITH A 1/4" [6mm] DRILL BIT GOING THROUGH GROUND RAIL BOARDS INTO POSTS AS SHOWN.**



197 (x4)  
LAG SCREW - 2 1/2"

178 (x4)  
AUGER GROUND STAKE BROWN