Garden coach plant holder Theresia plan

Plan for the garden coach in front of you, is a scale version of the farm vintage wheeled vehicle, drawn by horses in some regions of Austria-Hungary in 18th and 19th century.

The carriage was given the name of Maria Theresa, the most famous and capable ruler of the Habsburg Monarchy. We got the inspiration for the drawing from our childhood memory - an old wooden coach that Grandfather used when we were kids. The construction of the vehicle has been preserved well enough to allow us to make its reduced model. Carriages like these in full size today represent interesting decorations in yards, ethno houses and restaurants all over Europe. We have decided to offer one to you in reduced size, adjusted to (not only) women to keep their flower pots on it and thus decorate their yards, patios, terraces, etc.

Perhaps this project seems to be a complex one, but if you look at the drawings you will find that it consists of many parts the making of which actually does not require too much effort since they are of rather simple shapes. The woodworking joints in the project are not too complex, therefore you will need an averagely equipped workshop, basic knowledge of carpentry, as well as your goodwill to persevere and be precise on this project. Eventually you will be rewarded for your efforts by getting a beautiful decorative garden coach in your yard; the photos we took in our backyard will serve you as additional motivation. Such a beautiful garden decoration demands of you to find the right place for it and choose some flowerpots with beautiful flowers, and that is all! Any mistake is almost impossible to make!

In order to make it easier for you, we have divided the entire assembly into 8 sub-assemblies.

1. Wheel
2. Base
3. Bottom
4. Side
5. Back side
6. Front side
7. Joint
8. Side mirror

For each sub-assembly, we have prepared the drawings of each part, the drawing of the sub-assembly, its exploded view and the parts list. The plan also contains a drawing of the main assembly of the coach and its exploded view. All the necessary dimensions and views to understand and follow the instructions during the assembly process are given on each of the drawings.

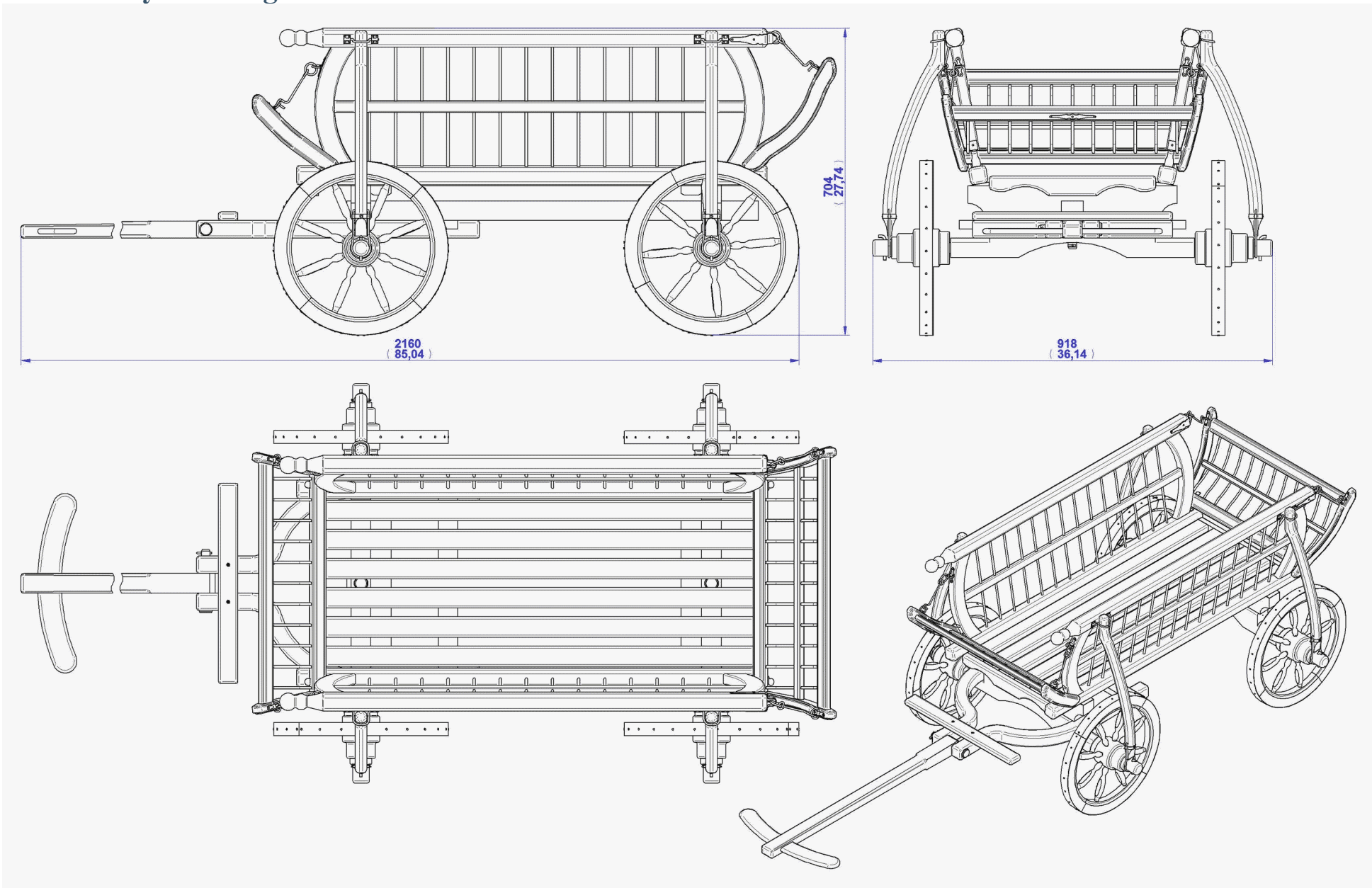
This is a big project which, regardless of the type of wood used and the finish applied, should be protected from weather impacts and put aside to prevent the rotting of wood and thus make it more durable. Exposure to short-term summer rains is not as much a problem as long-lasting rain or weather conditions with temperatures below zero. If you place the carriage in the open air during summer, we recommend that you put some bricks (or the like) beneath the wheels as these will separate the wheels from the ground and allow faster draining of water and drying.

The coach can be completely disassembled into the mentioned sub-assemblies, so it can be easily moved. In addition, the wheels are fully functional and there is no need to disassemble it in order to be able to take a ride (or pull, push or turn it aside).

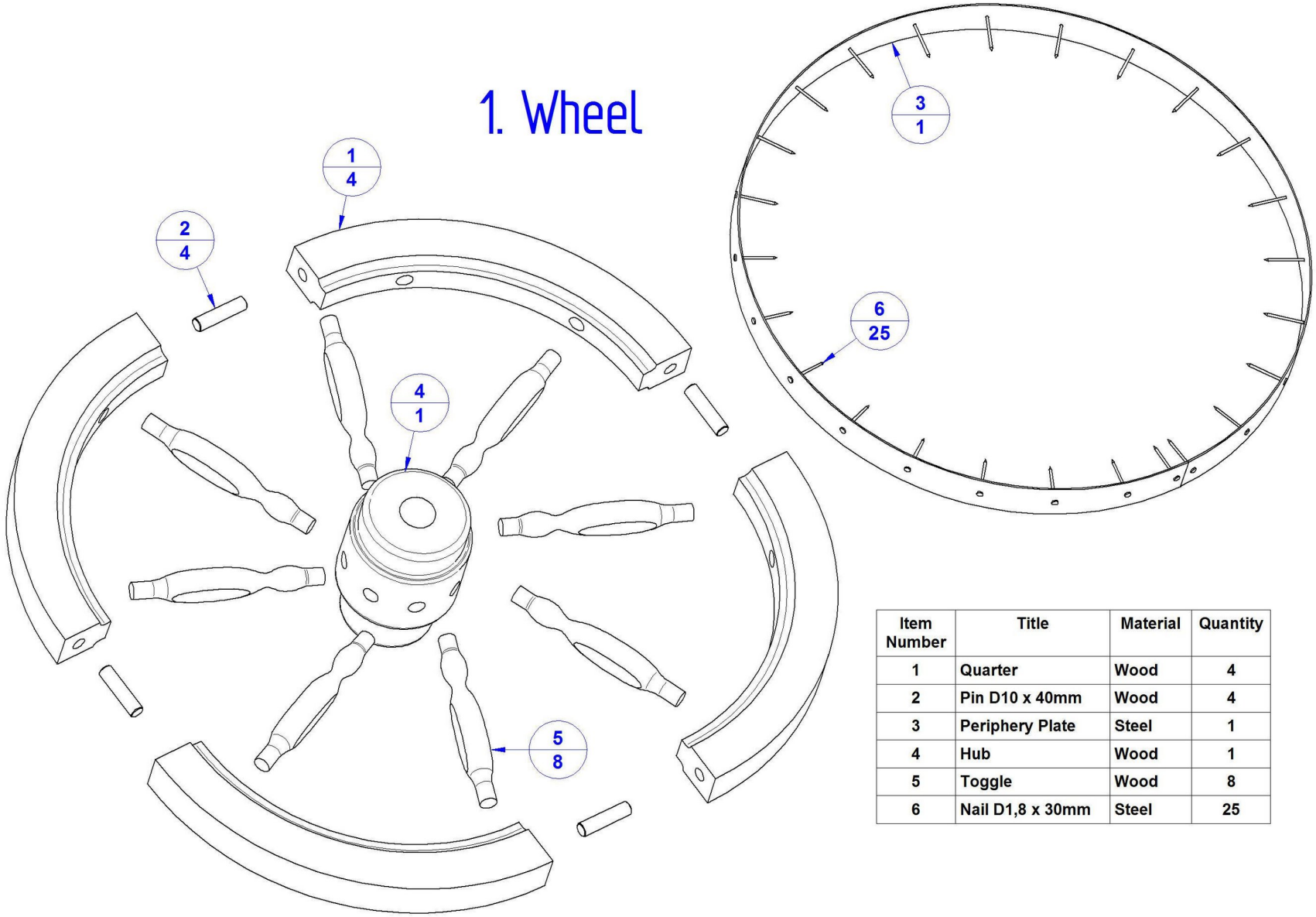
Subassembly List

Item Number	Title	Quantity
1	Wheel	4
2	Base	1
3	Bottom	1
4	Side	1
5	Back Side	1
6	Front Side	1
7	Joint	4
8	Side Mirror	1

Main Assembly Drawing

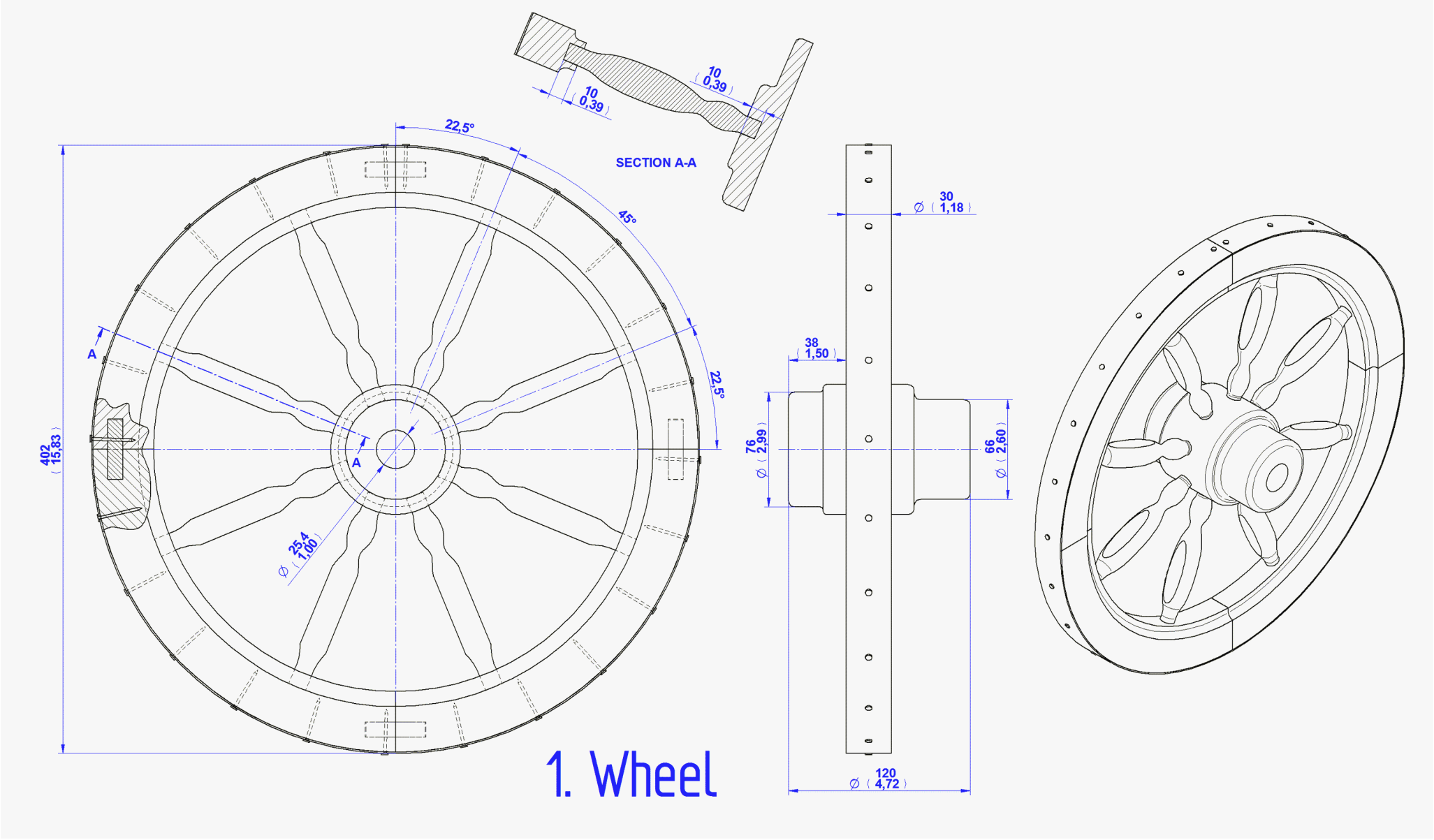


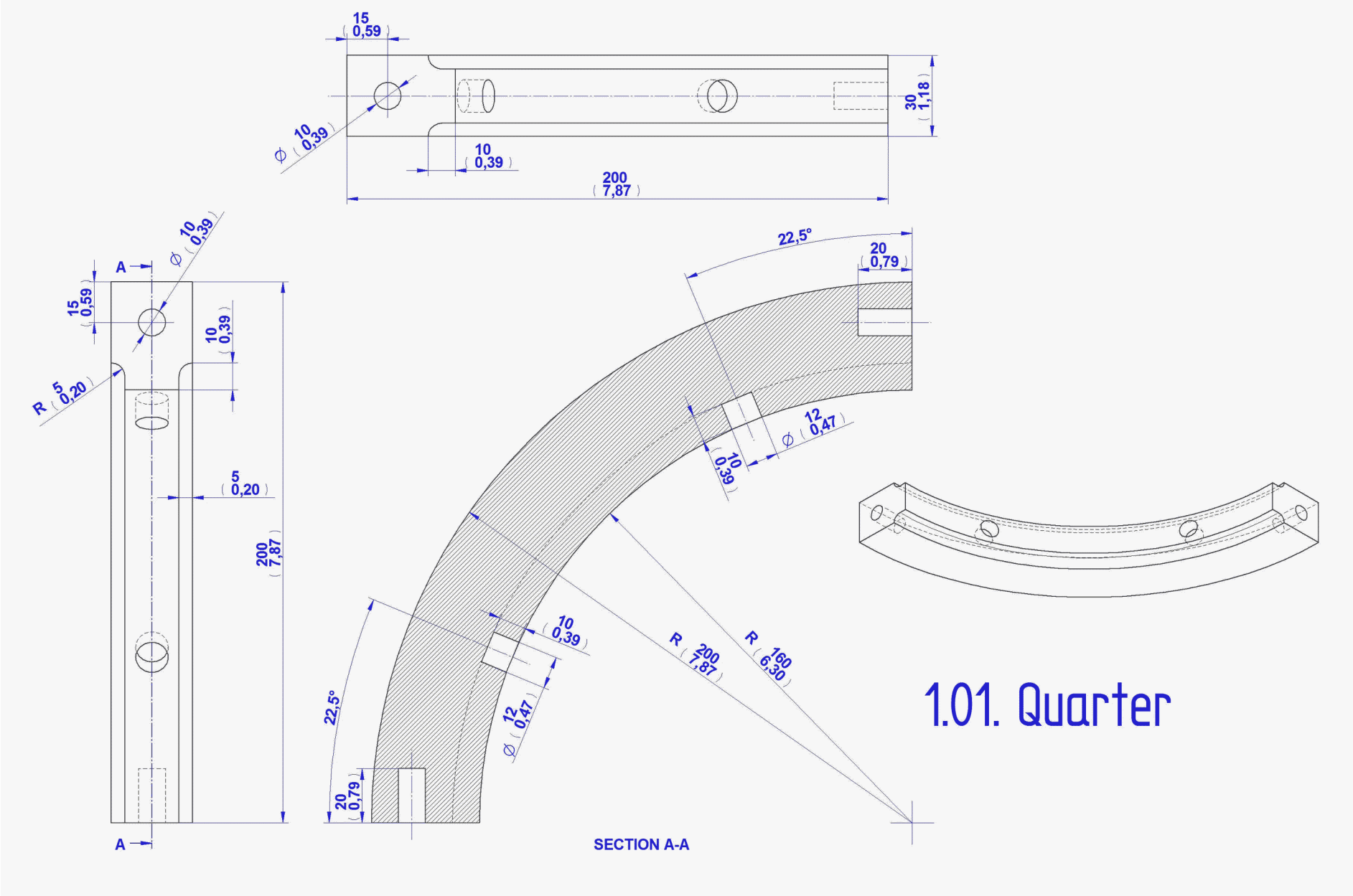
1. Wheel - Parts List

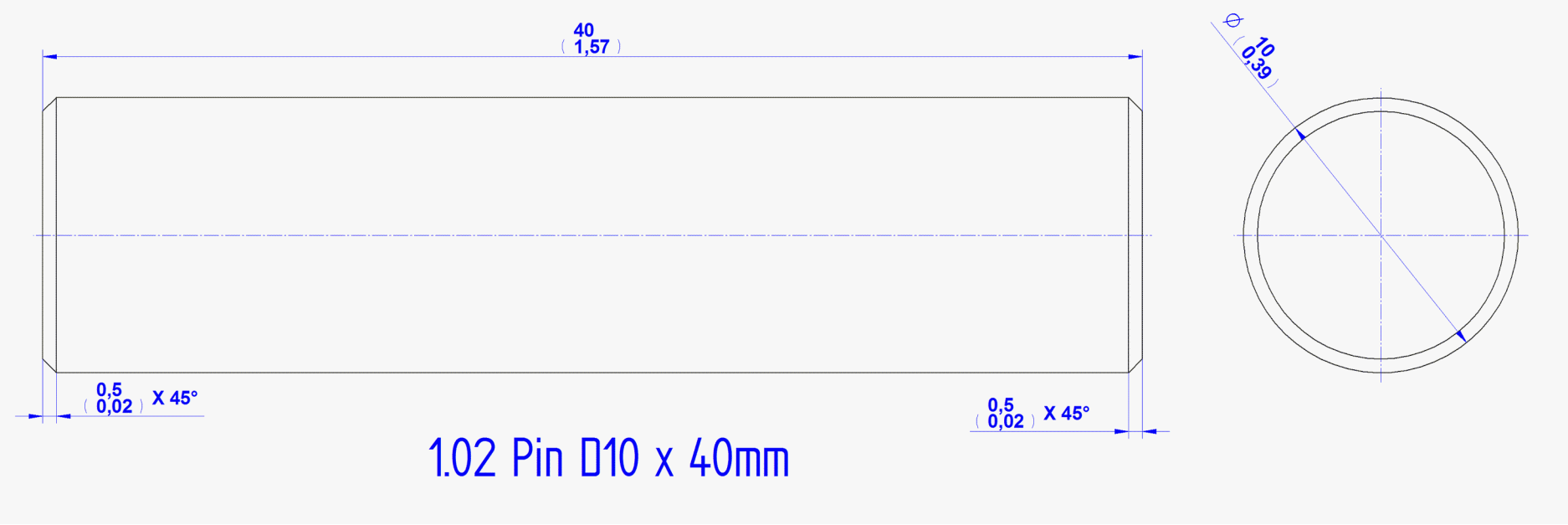


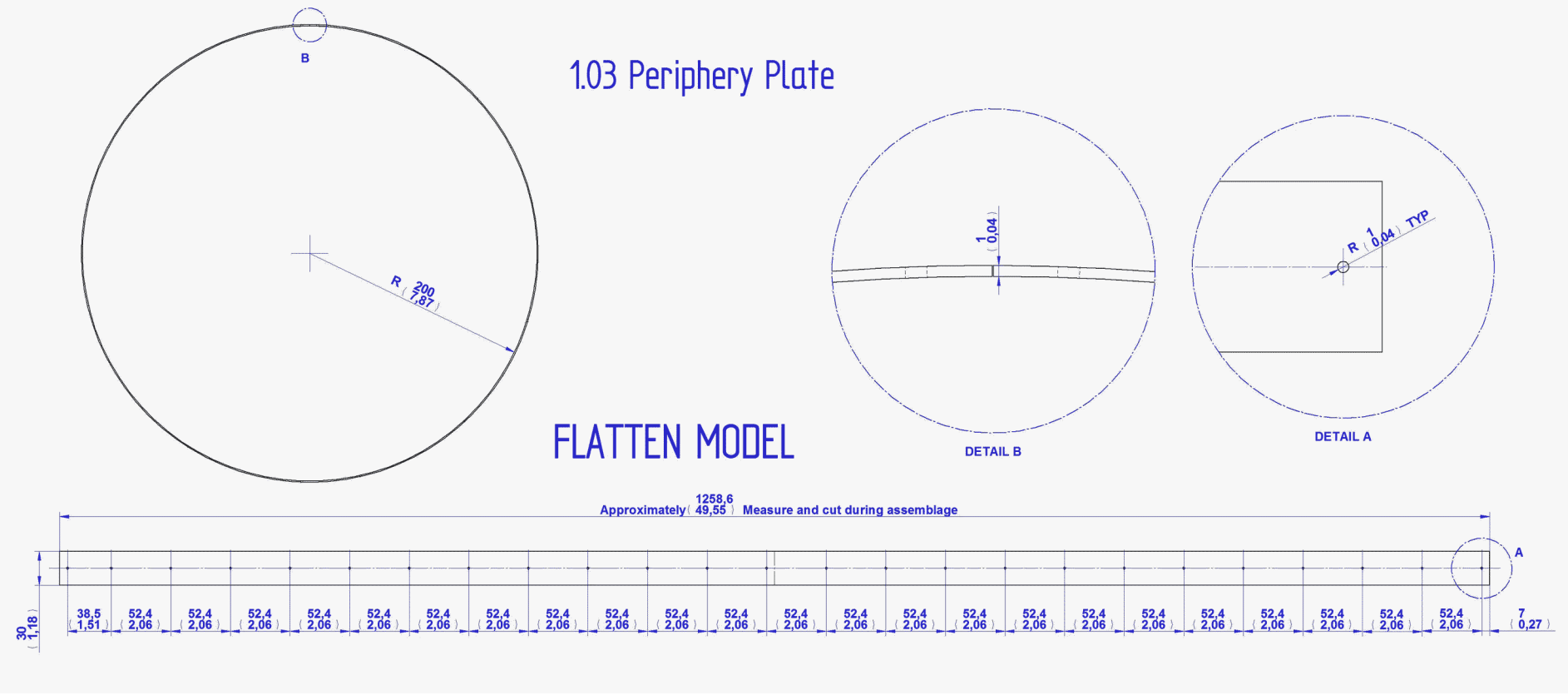
Item Number	Title	Material	Quantity
1	Quarter	Wood	4
2	Pin D10 x 40mm	Wood	4
3	Periphery Plate	Steel	1
4	Hub	Wood	1
5	Toggle	Wood	8
6	Nail D1,8 x 30mm	Steel	25

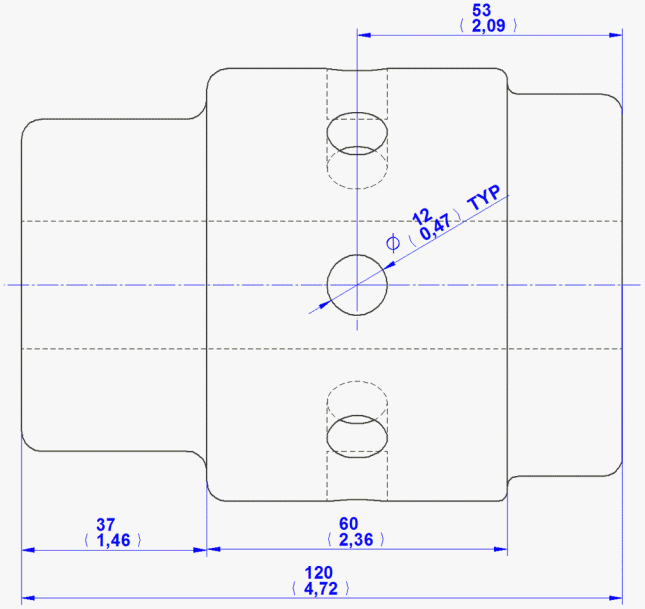
Wheel Suassembly Drawing

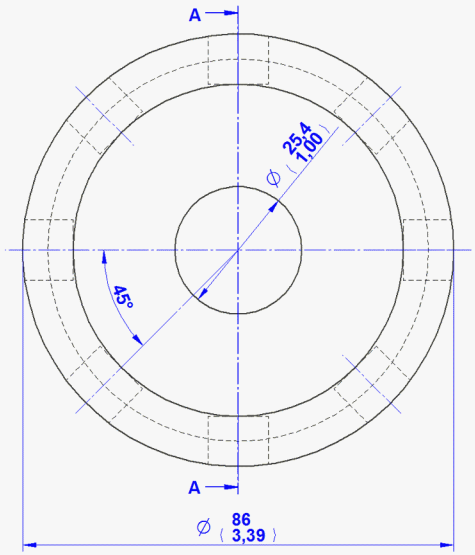


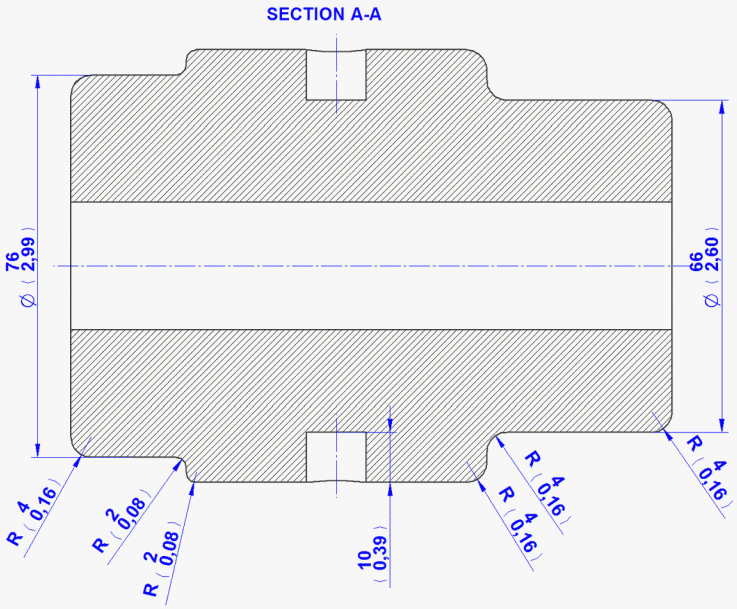

15
0,59
30
1,18
10
0,39
200
7,87
22,5°
20
0,79
12
0,47
R 200
7,87
R 160
6,30
R 5
0,20
A
SECTION A-A
1.01. Quarter

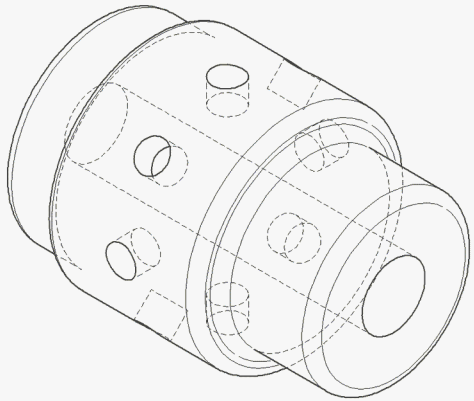

40
(1,57)
Ø 10
(0,39)
0,5
(0,02) X 45°
0,5
(0,02) X 45°
1.02 Pin D10 x 40mm


1.03 Periphery Plate
B
R 200 (7,87)
FLATTEN MODEL
1 (0,04)
DETAIL B
R 1 (0,04) TYP
DETAIL A
1258,6
Approximately (49,55) Measure and cut during assemblage
A
30 (1,18)
38,5 (1,51)
52,4 (2,06)
7 (0,27)

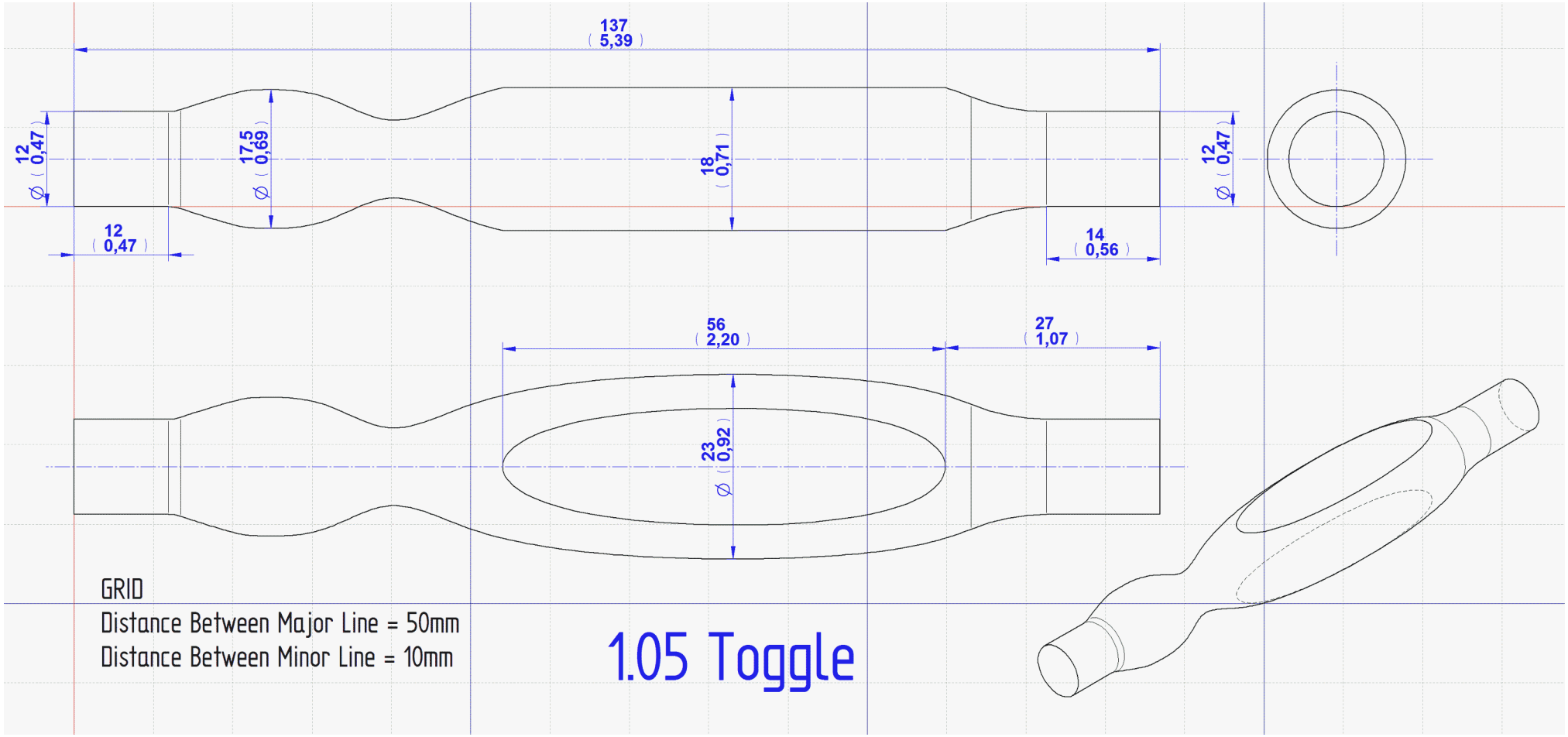

53
2,09
Ø 12
0,47
TYP
37
1,46
60
2,36
120
4,72

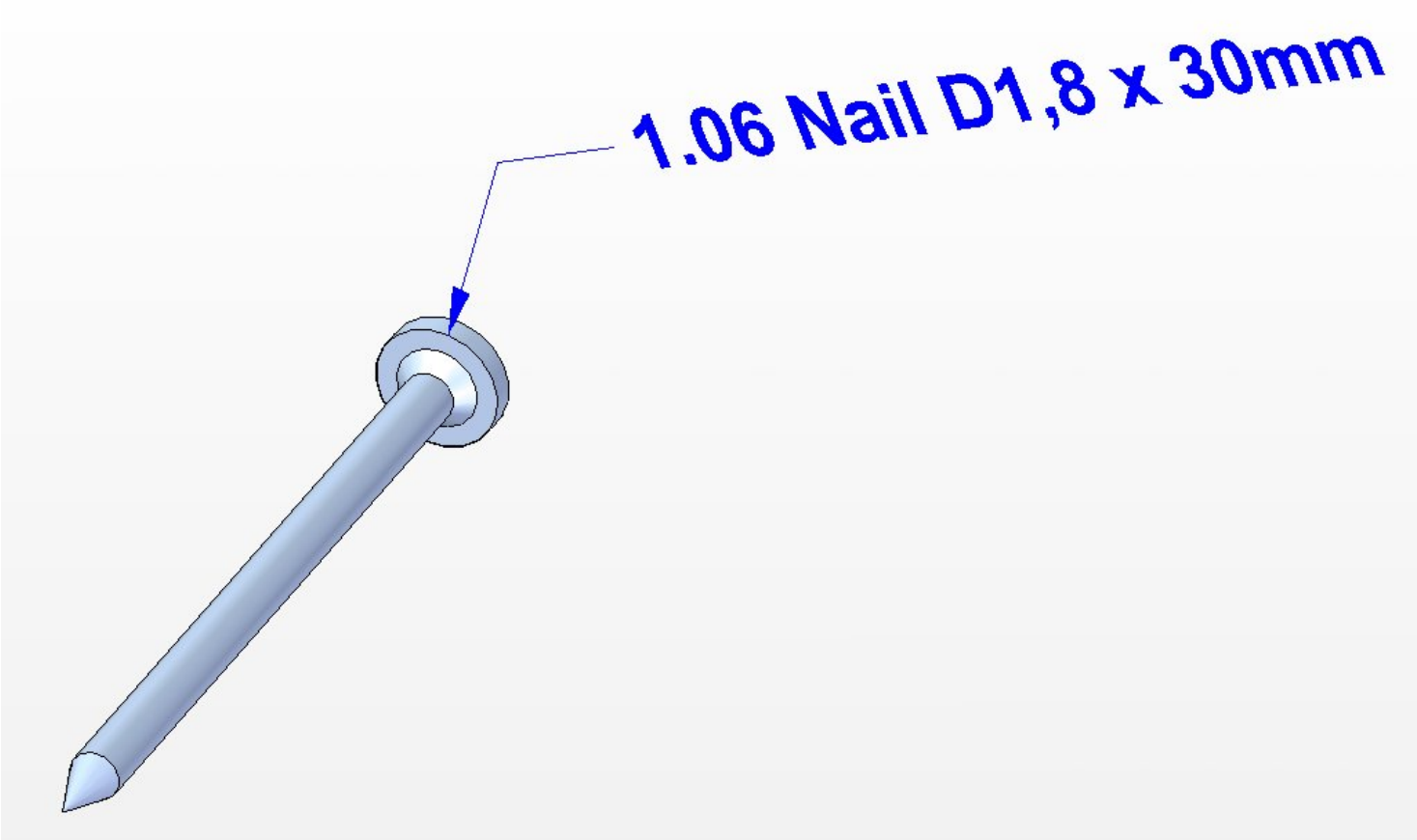

A
A
Ø 25,4
1,00
45°
Ø 86
3,39


SECTION A-A
Ø 76
2,99
Ø 66
2,60
R 4
0,16
R 2
0,08
R 2
0,08
10
0,39
R 4
0,16
R 4
0,16
R 4
0,16

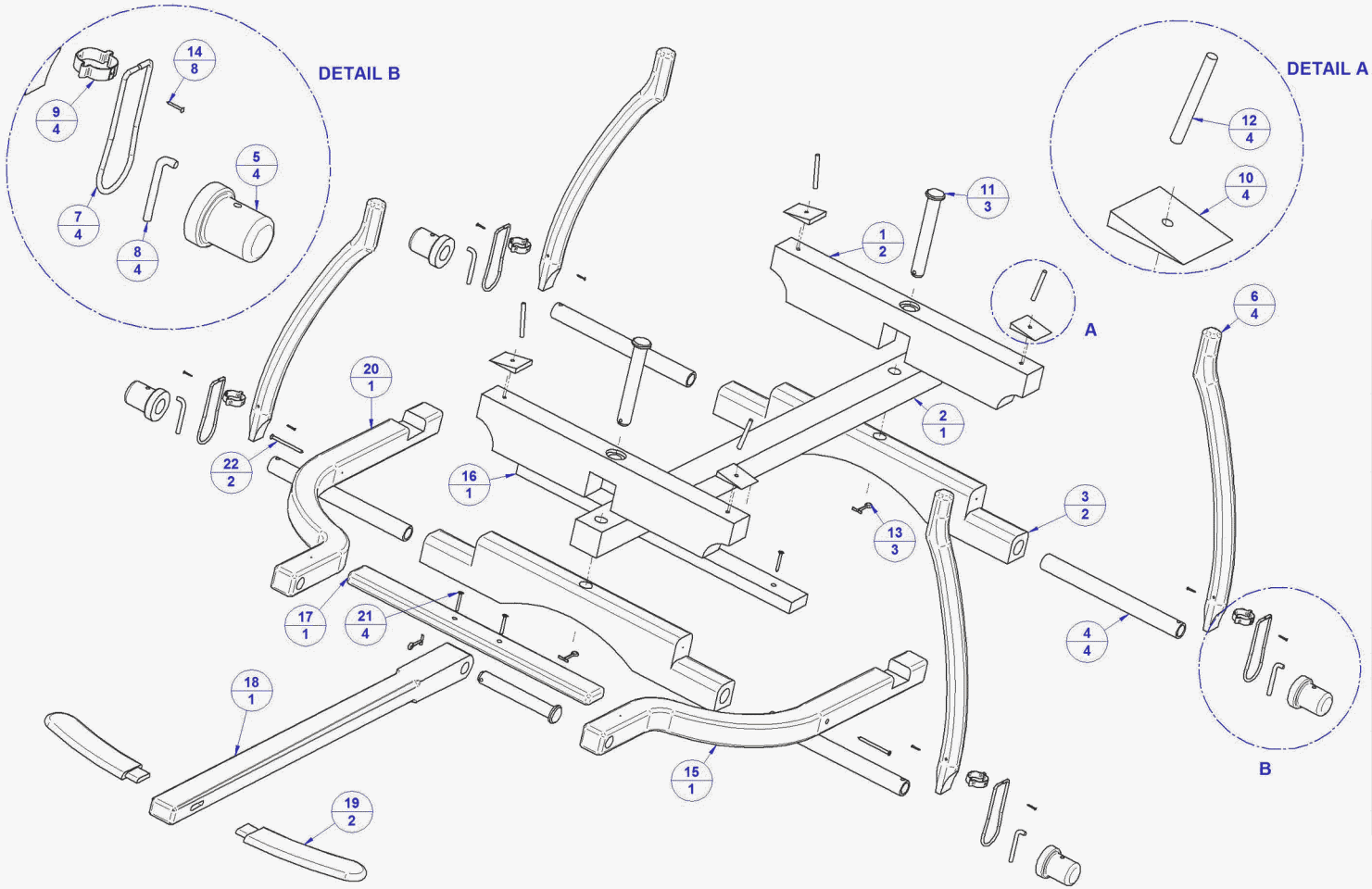


1.04 Hub


137
(5,39)
12
(0,47)
Ø
17,5
(0,69)
18
(0,71)
12
(0,47)
Ø
12
(0,47)
14
(0,56)
56
(2,20)
27
(1,07)
23
(0,92)
Ø
GRID
Distance Between Major Line = 50mm
Distance Between Minor Line = 10mm
1.05 Toggle

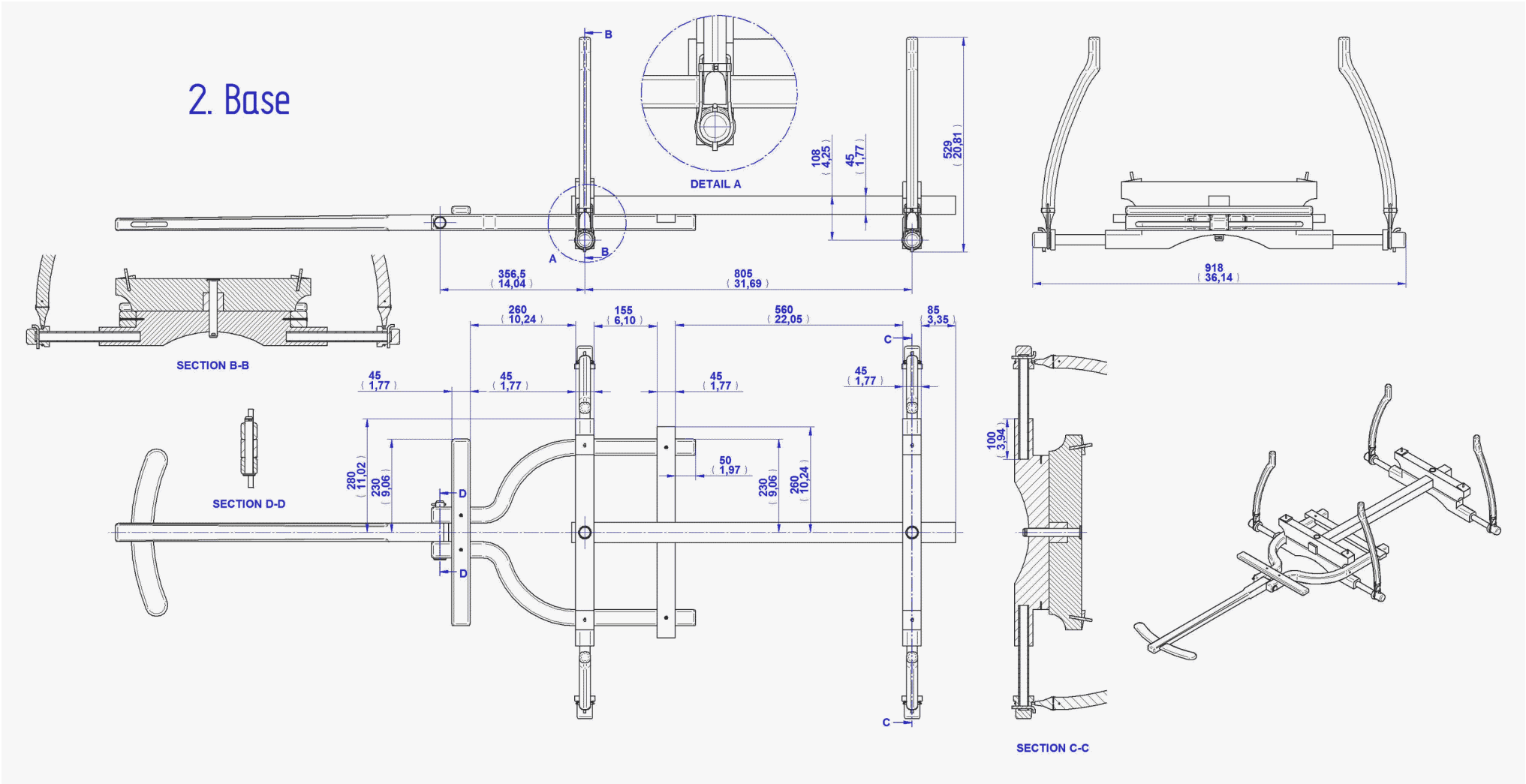

1.06 Nail D1,8 x 30mm

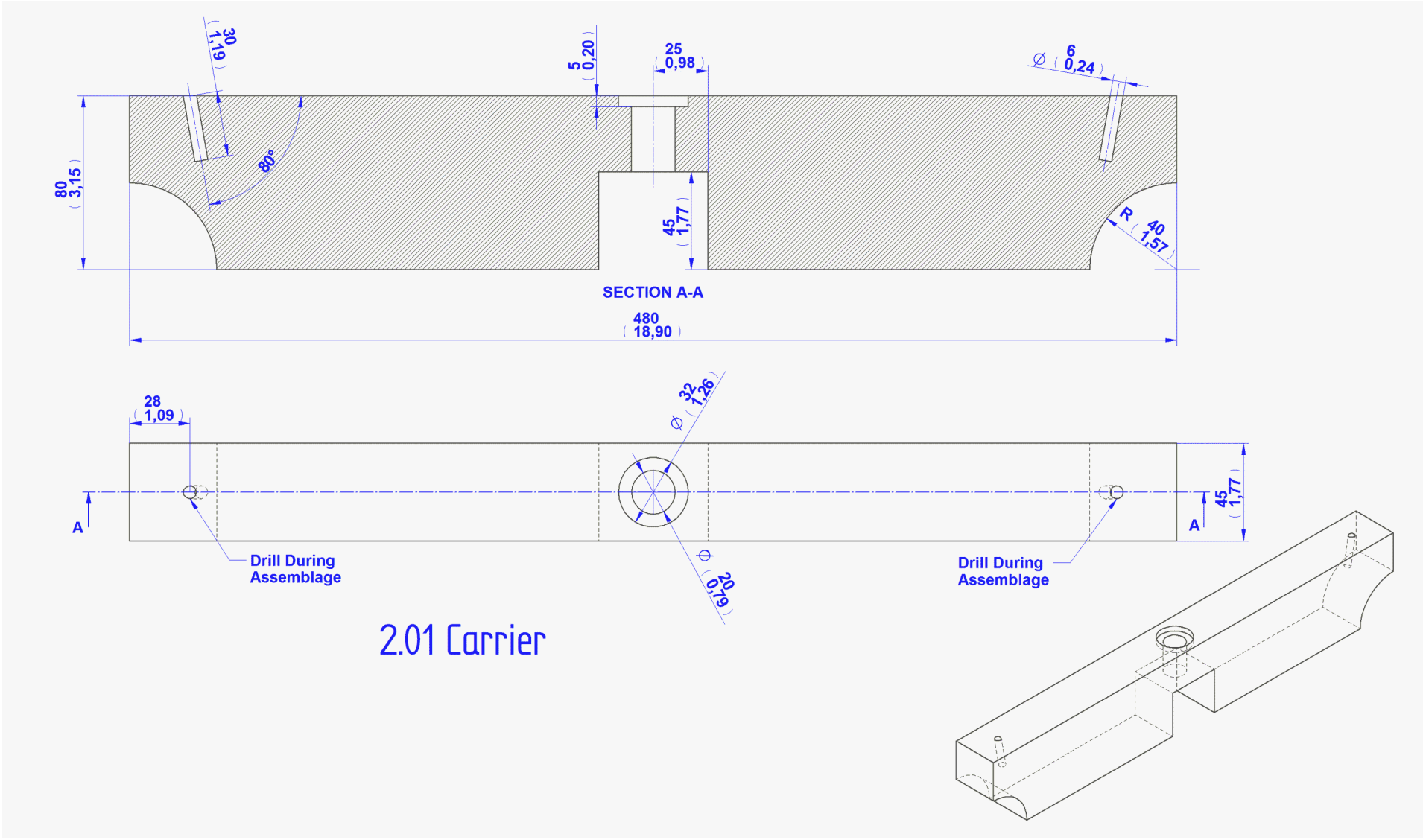
2. Base Subassembly - Parts List

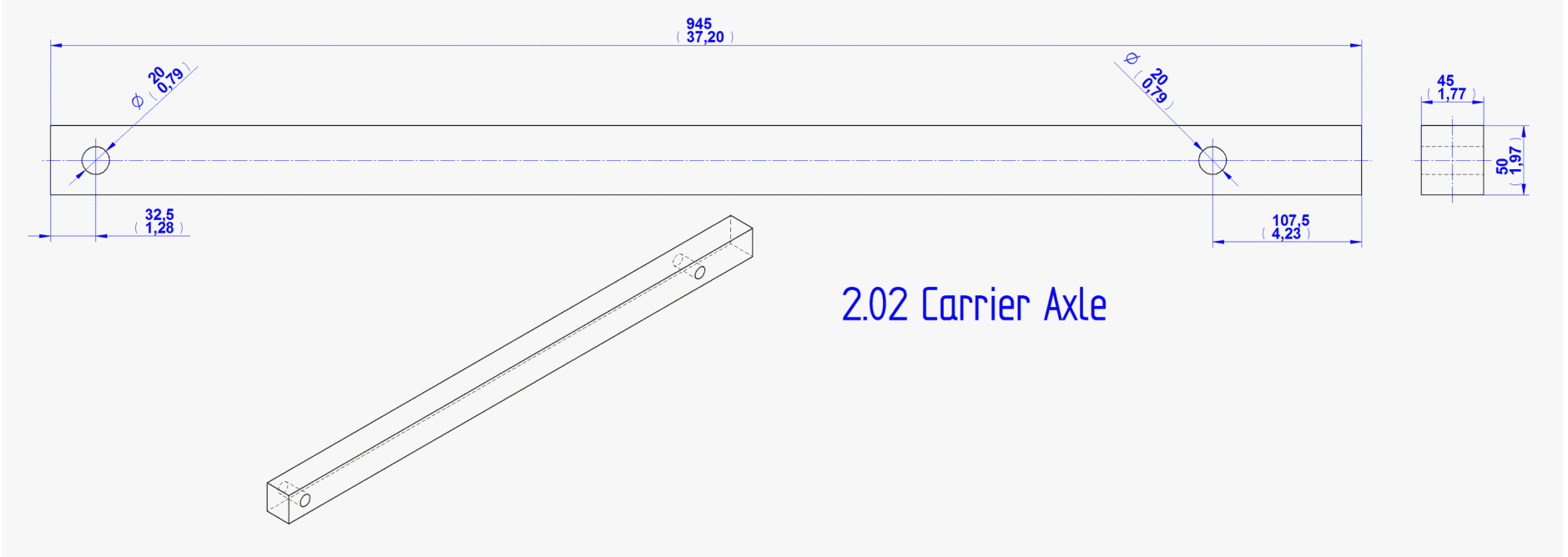


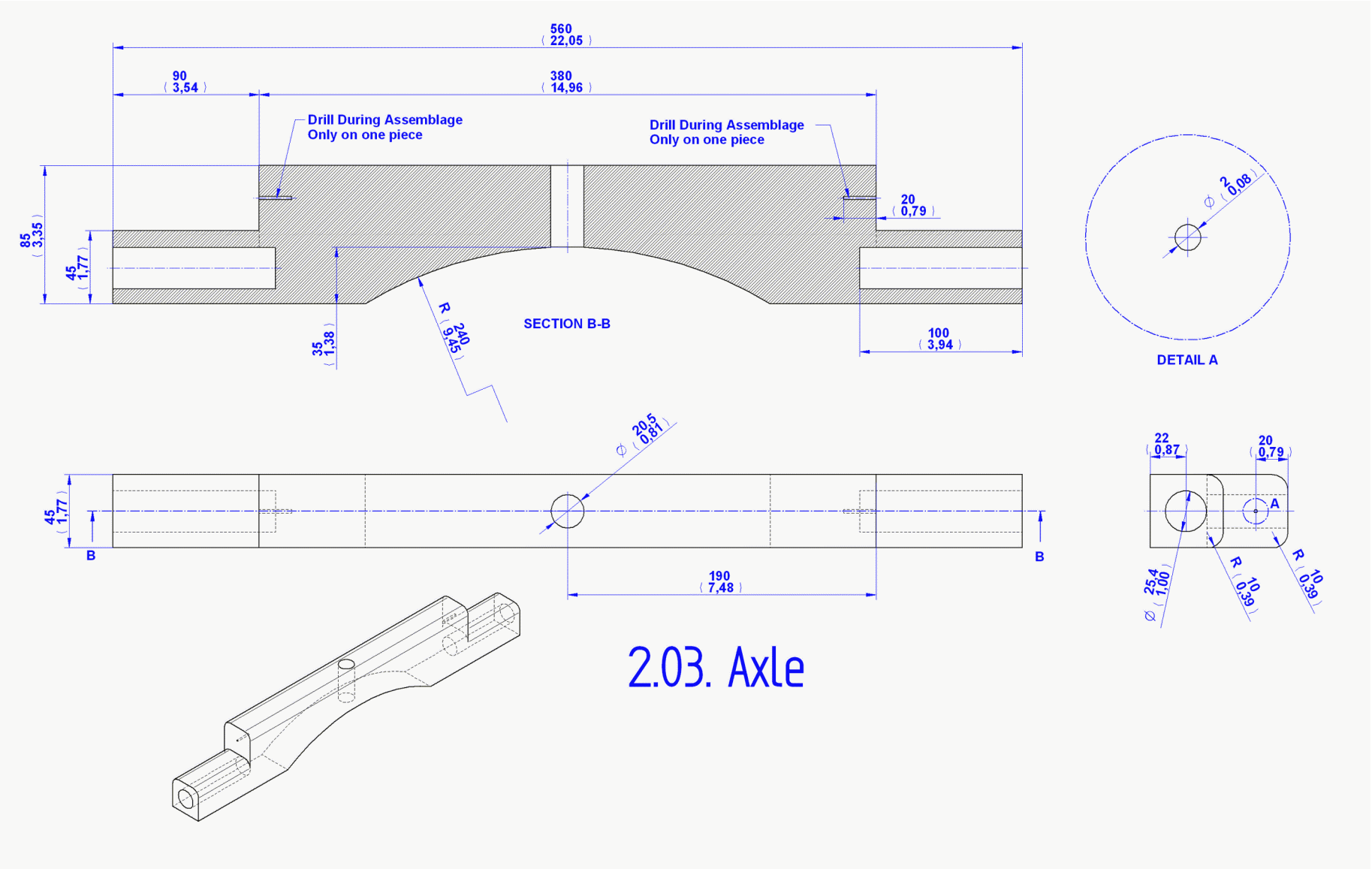
Item Number	Title	Material	Quantity	Category
1	Carrier	Wood	2	
2	Carrier Axle	Wood	1	
3	Axle	Wood	2	
4	Tubular Axle	Steel	4	
5	Axle Cover	Wood	4	
6	Leg	Wood	4	
7	Leg Holder Wire	Steel	4	
8	Pin D6mm	Steel	4	
9	Leg Holder Sheet Metal	Steel	4	
10	Limiter	Wood	4	
11	Pin D20 x 140mm	Steel	3	Standard Part
12	Side Support	Steel	4	
13	Split Pin D4 x 32mm	Steel	3	Standard Part
14	Tack D1,6 x 15mm	Steel	8	Standard Part
15	Curved Base Plank	Wood	1	
16	Back Base Plank	Wood	1	
17	Front Base Plank	Wood	1	
18	Pull Plank	Wood	1	
19	Handle	Wood	2	
20	Curved Base Plank Mirror	Wood	1	
21	Wood Screw D4x35mm	Steel	4	Standard Part
22	Wood Screw D4 x 60mm	Steel	2	Standard Part

Wheel Subassembly Drawing

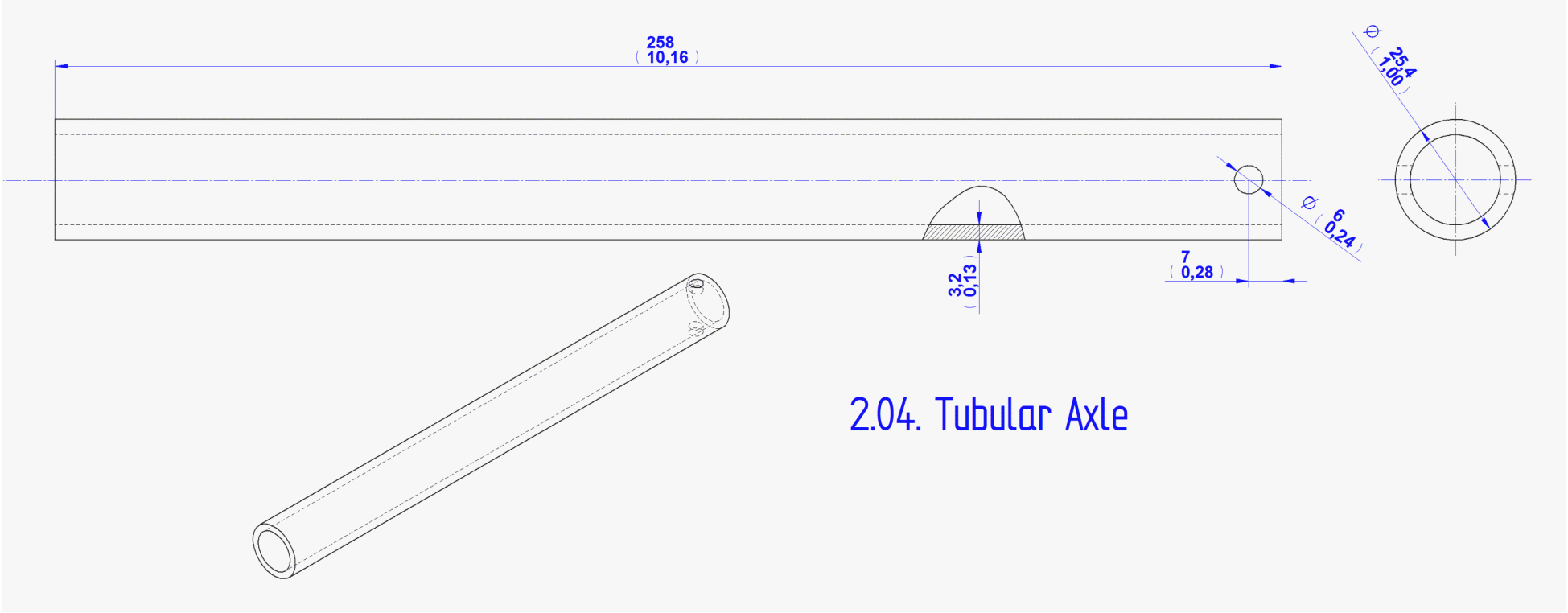



30
1,19
5
0,20
25
0,98
Ø 6
0,24
80
3,15
80°
45
1,77
R 40
1,57
SECTION A-A
480
18,90
28
1,09
Ø 32
1,26
A
A
45
1,77
Drill During
Assemblage
Drill During
Assemblage
Ø 20
0,79
2.01 Carrier

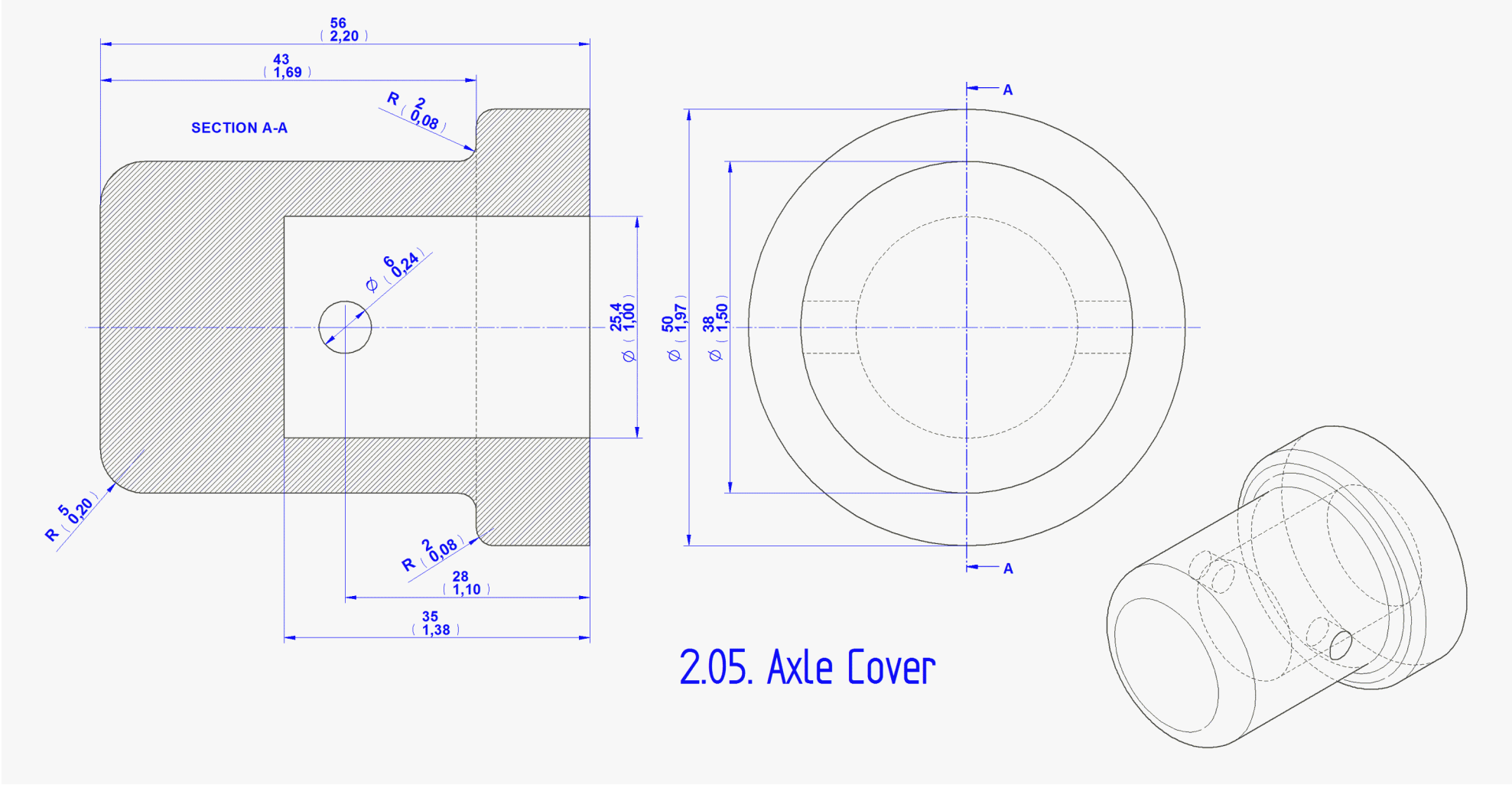

945
37,20
Ø 20
0,79
Ø 20
0,79
45
1,77
50
1,97
32,5
1,28
107,5
4,23
2.02 Carrier Axle

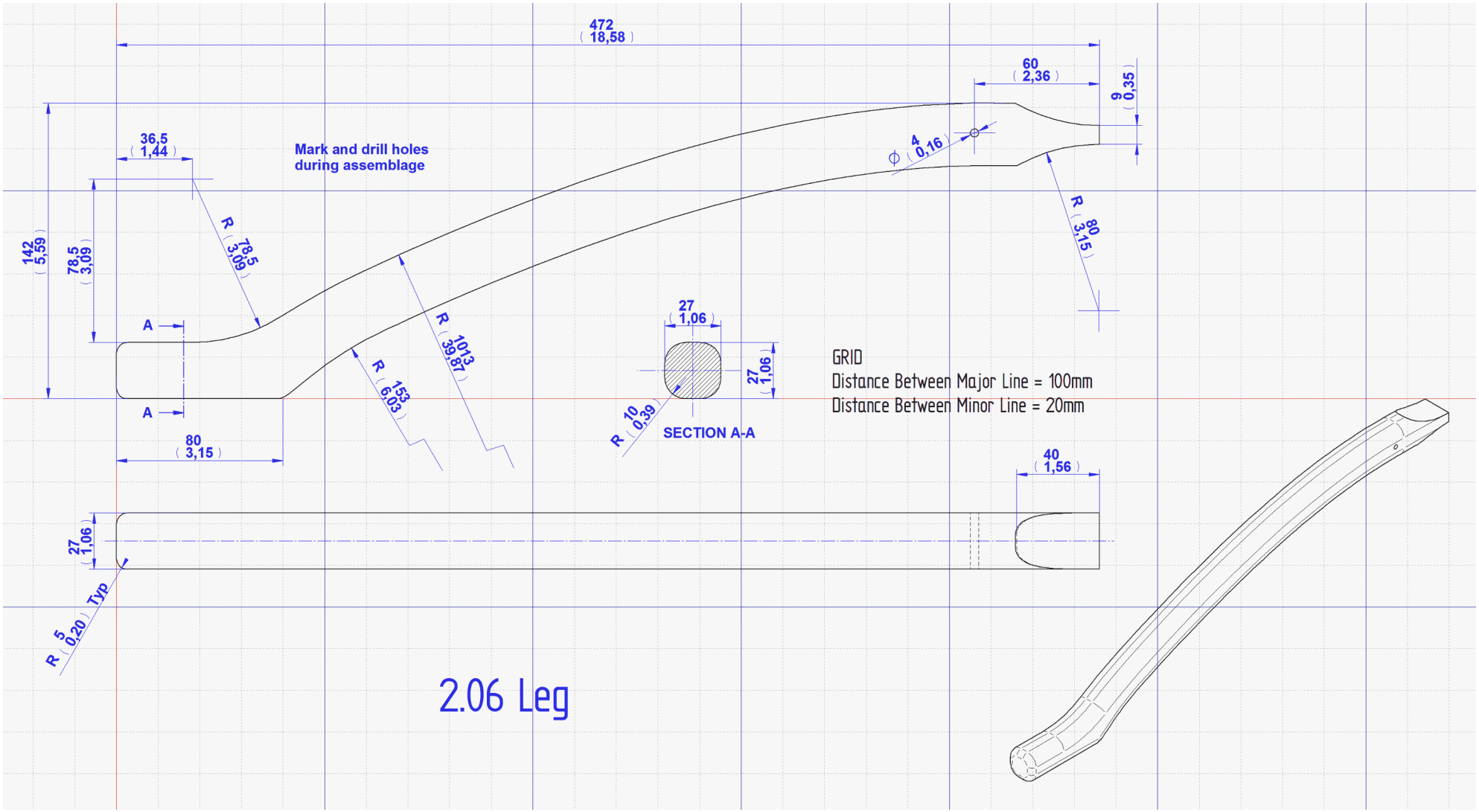

560
22,05
90
3,54
380
14,96
Drill During Assemblage
Only on one piece
Drill During Assemblage
Only on one piece
85
3,35
45
1,77
20
0,79
35
1,38
R
240
9,45
SECTION B-B
100
3,94
2
0,08
DETAIL A
20,5
0,81
45
1,77
B
B
190
7,48
22
0,87
20
0,79
A
25,4
1,00
R
10
0,39
R
10
0,39

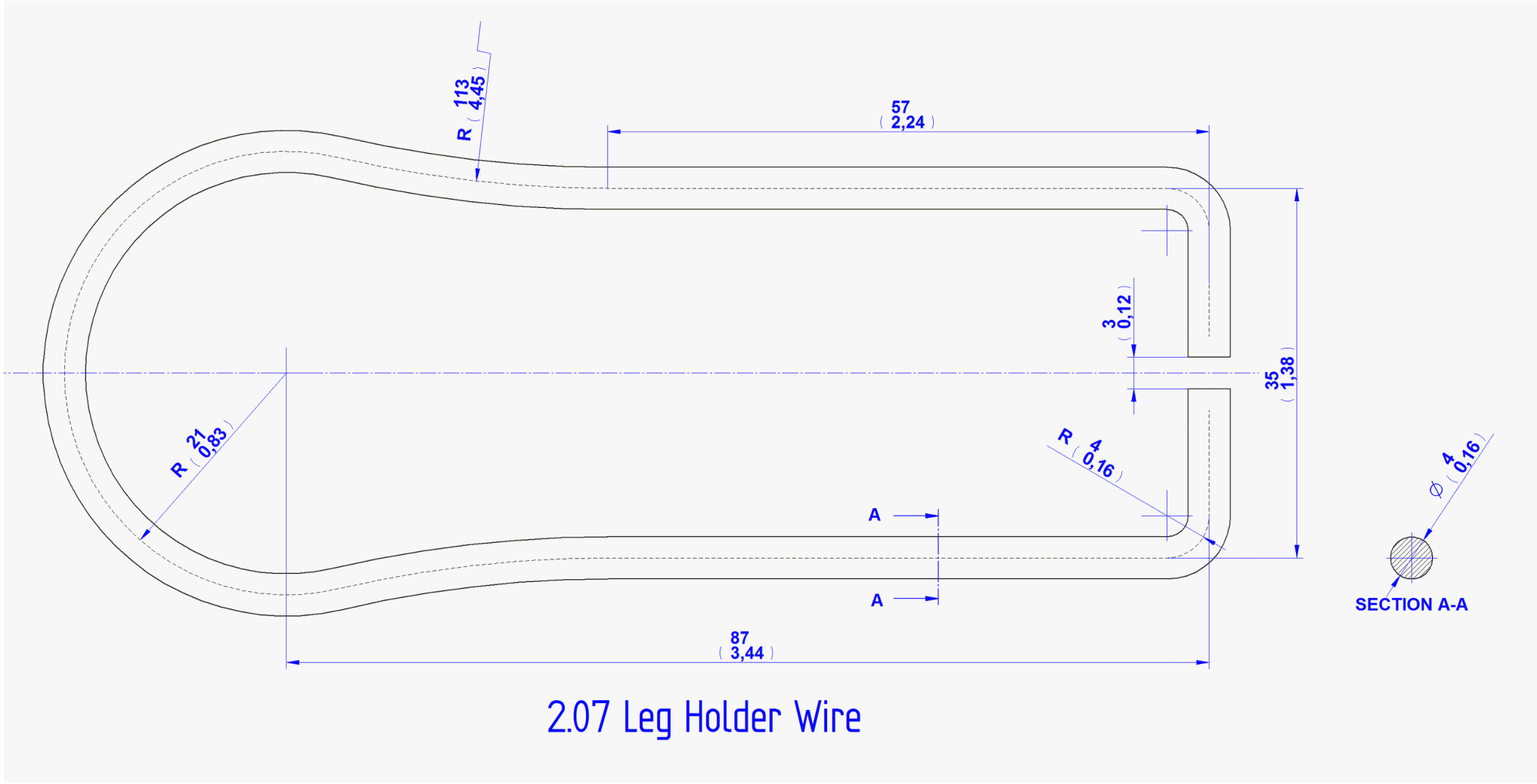
2.03. Axle



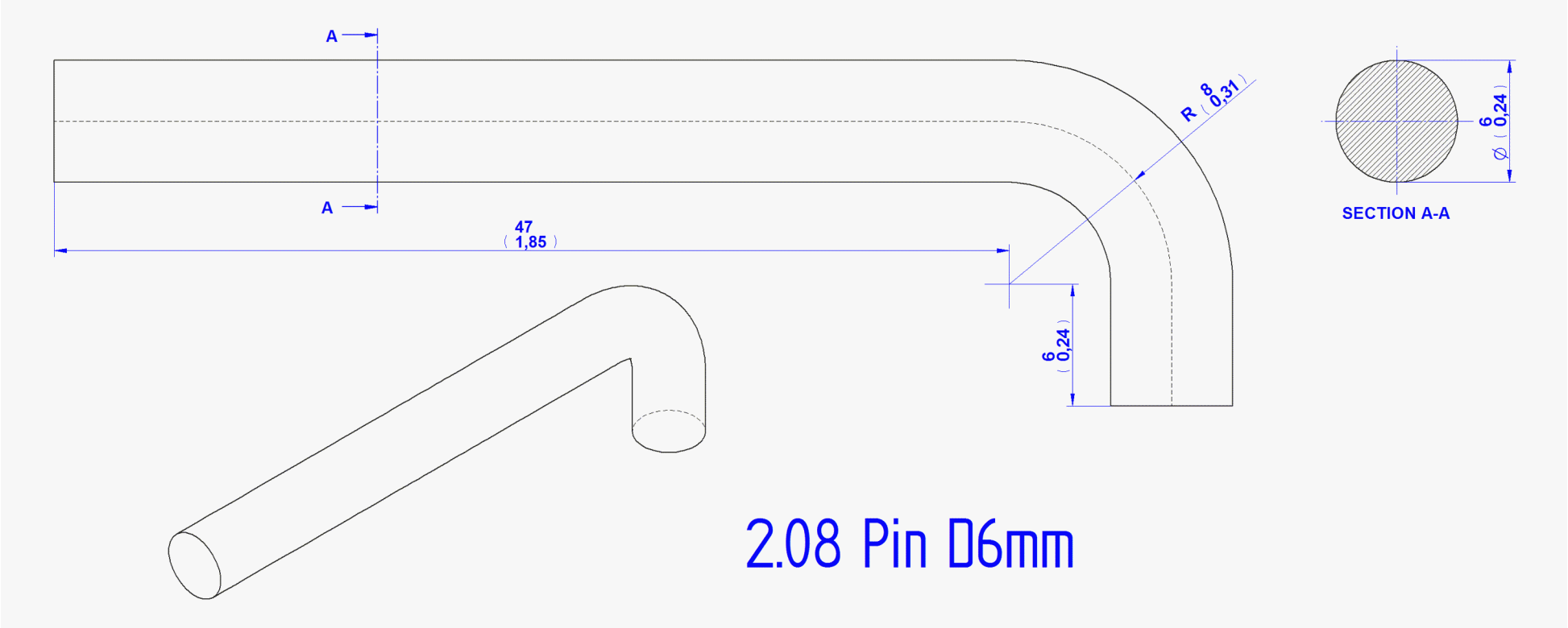
2.04. Tubular Axle

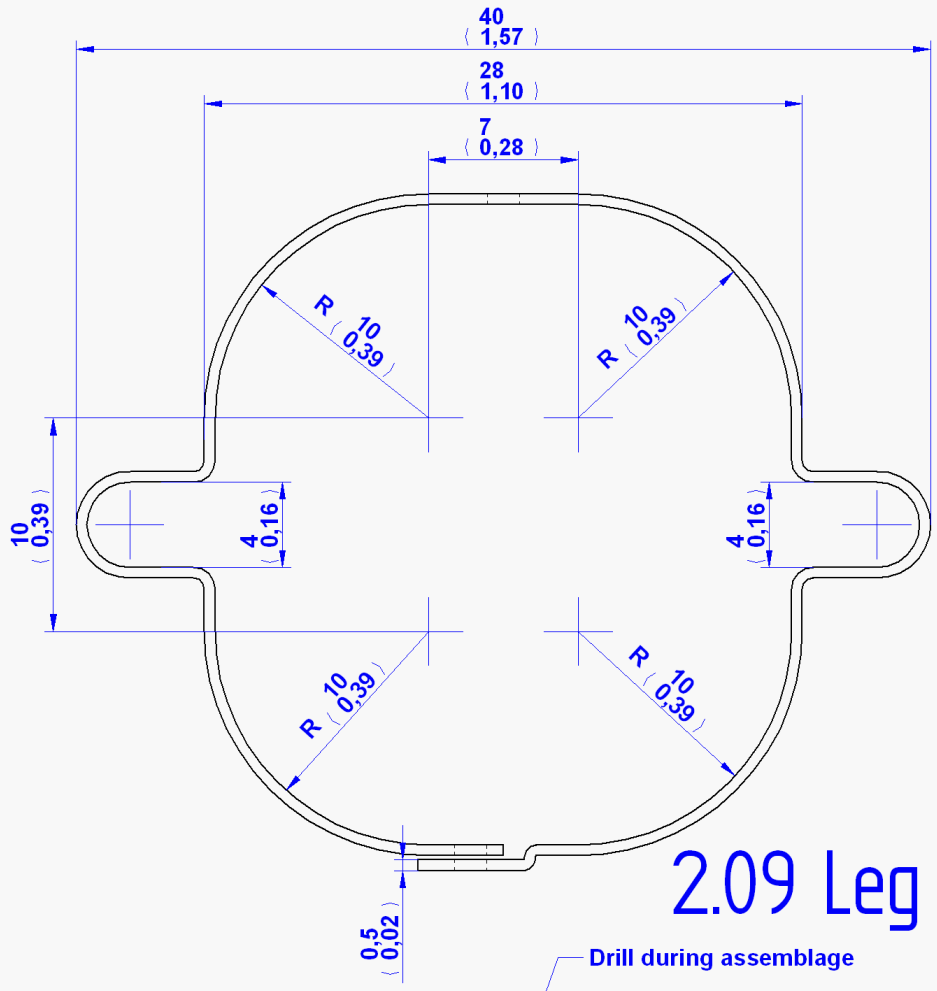

56
(2,20)
43
(1,69)
R 2
(0,08)
SECTION A-A
Ø 6
(0,24)
25,4
(1,00)
R 5
(0,20)
R 2
(0,08)
28
(1,10)
35
(1,38)
A
A
50
(1,97)
38
(1,50)
2.05. Axle Cover

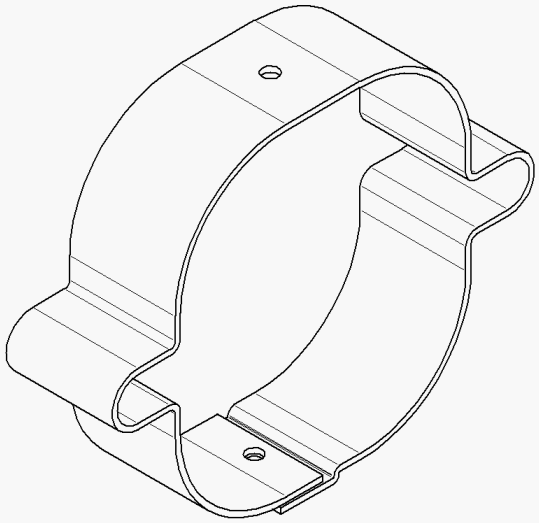

472
18,58
60
2,36
9
0,35
36,5
1,44
Mark and drill holes
during assemblage
4
0,16
R 80
3,15
142
5,59
78,5
3,09
R 78,5
3,09
A
A
R 1013
39,87
R 153
6,03
27
1,06
27
1,06
R 10
0,39
SECTION A-A
GRID
Distance Between Major Line = 100mm
Distance Between Minor Line = 20mm
80
3,15
40
1,56
27
1,06
R 5
0,20
Typ
2.06 Leg



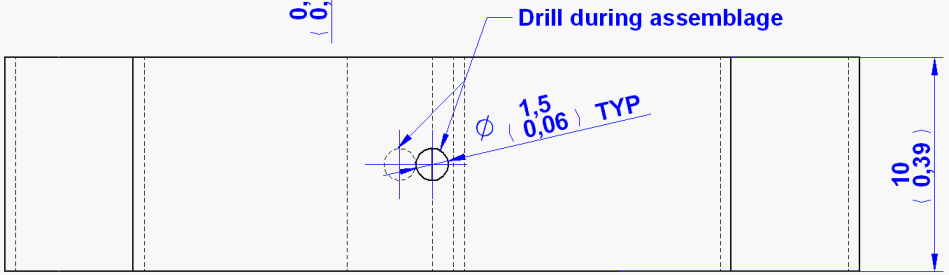
2.07 Leg Holder Wire

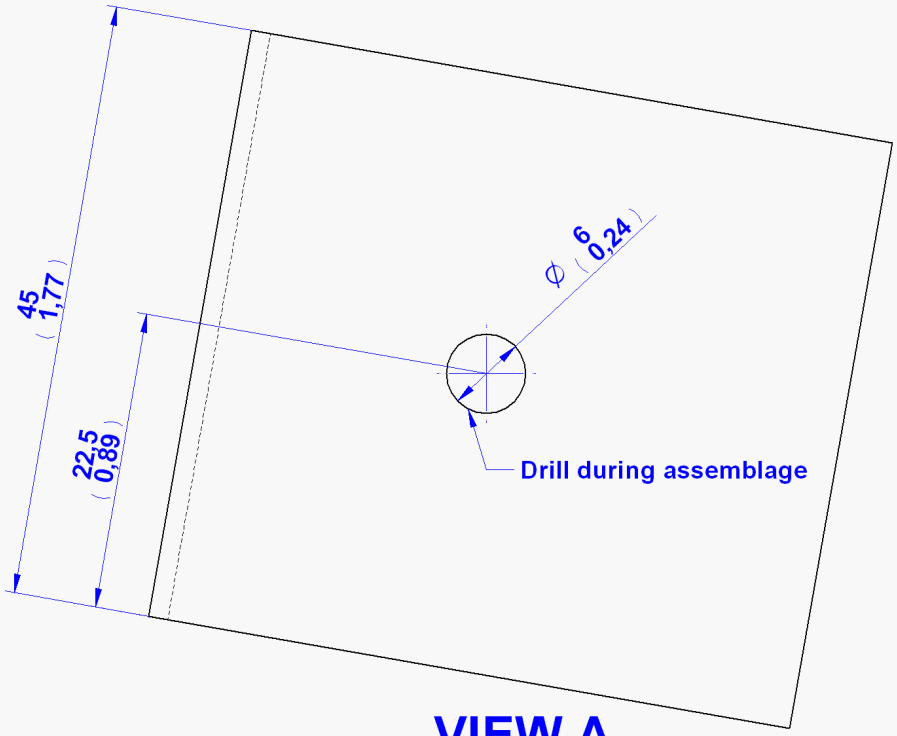

A
A
47
(1,85)
R 8
(0,31)
6
(0,24)
SECTION A-A
6
(0,24)
2.08 Pin D6mm



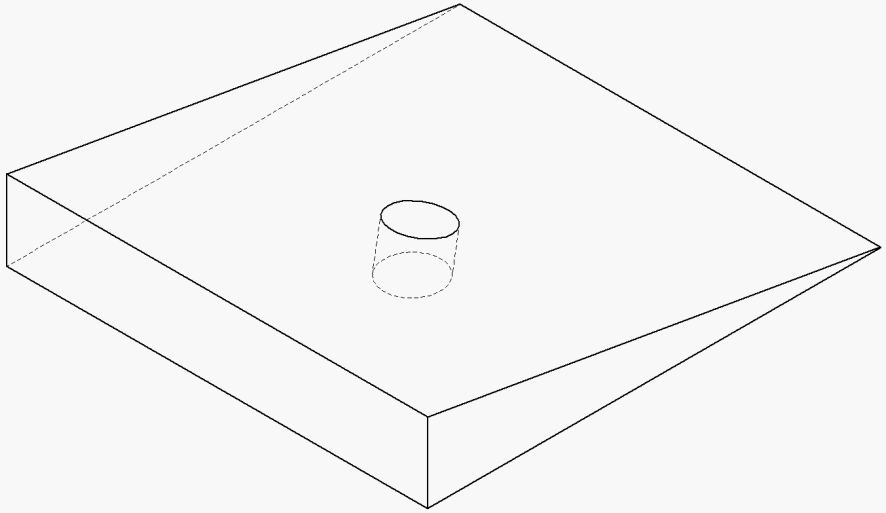


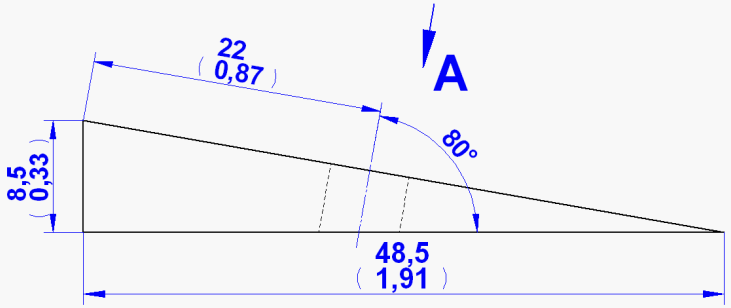
2.09 Leg Holder Sheet Metal



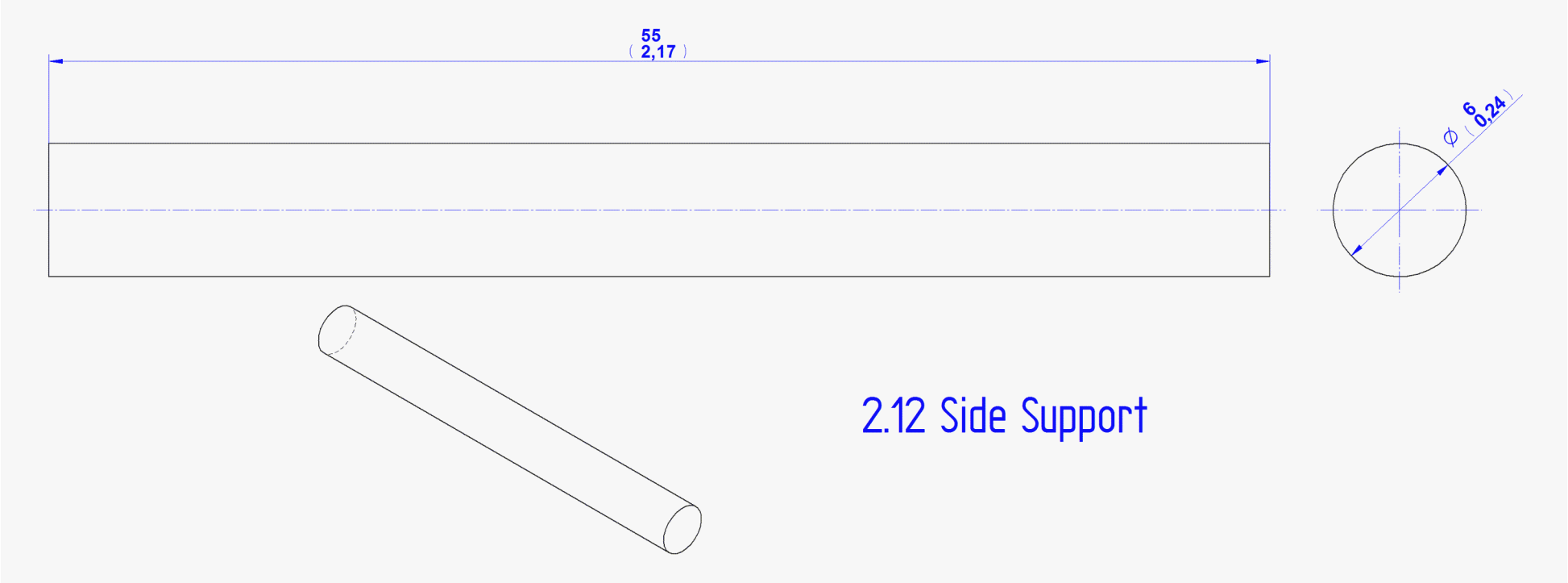


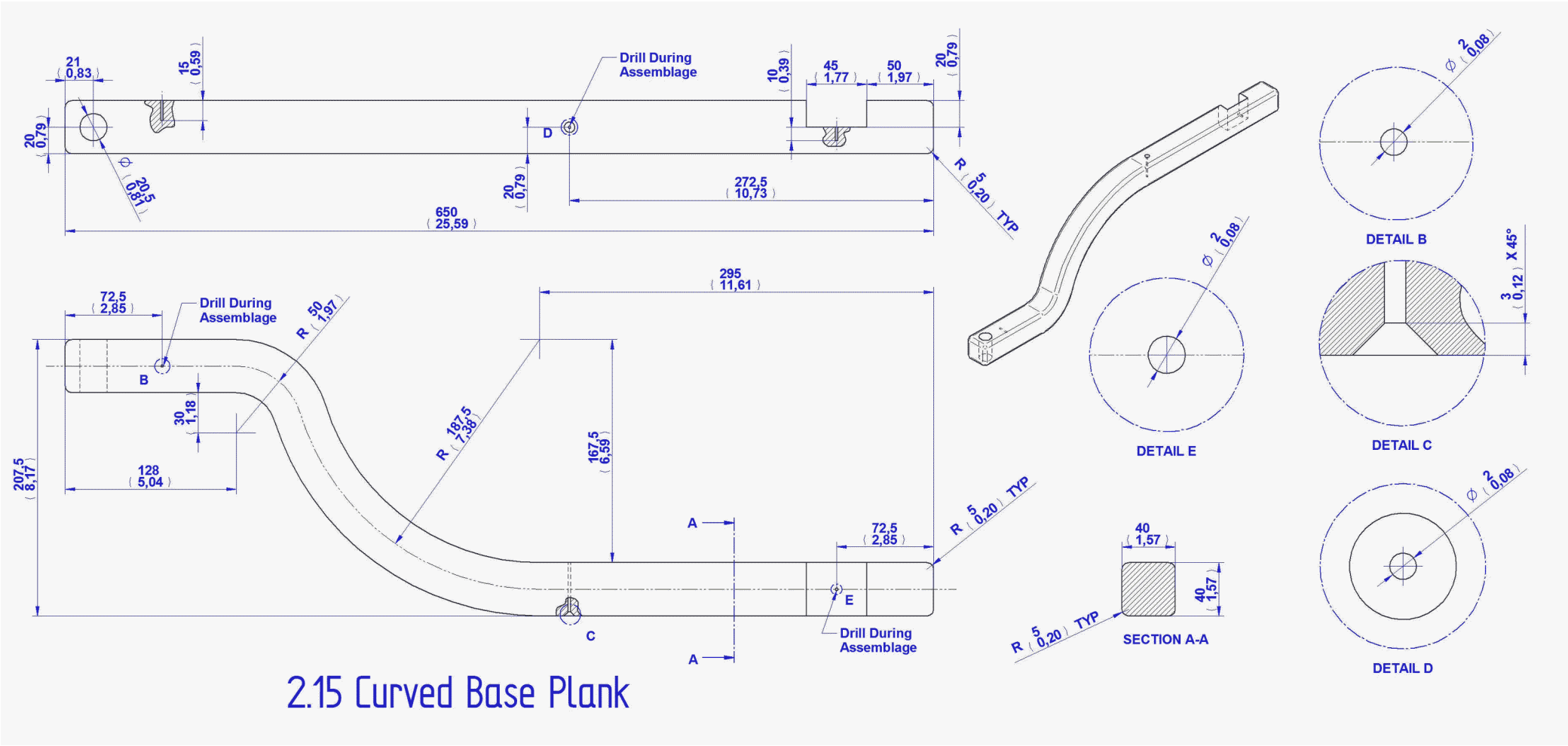
VIEW A



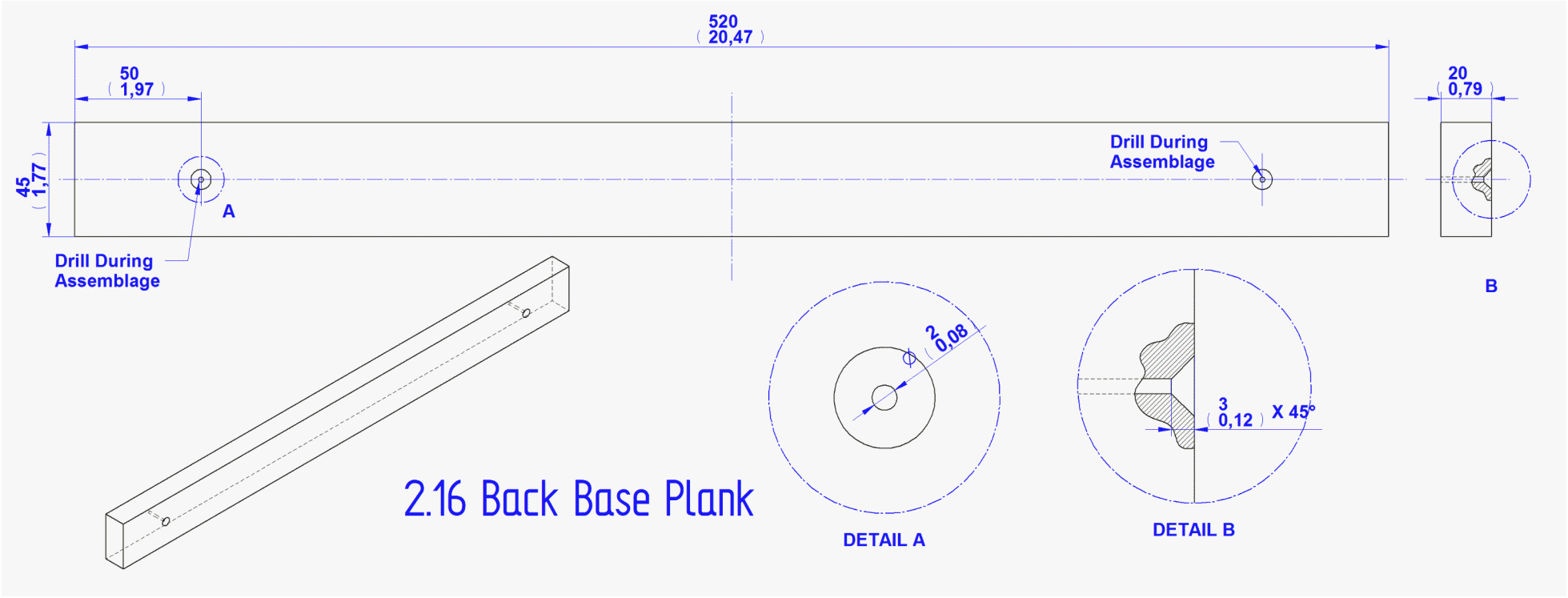


2.10 Limiter

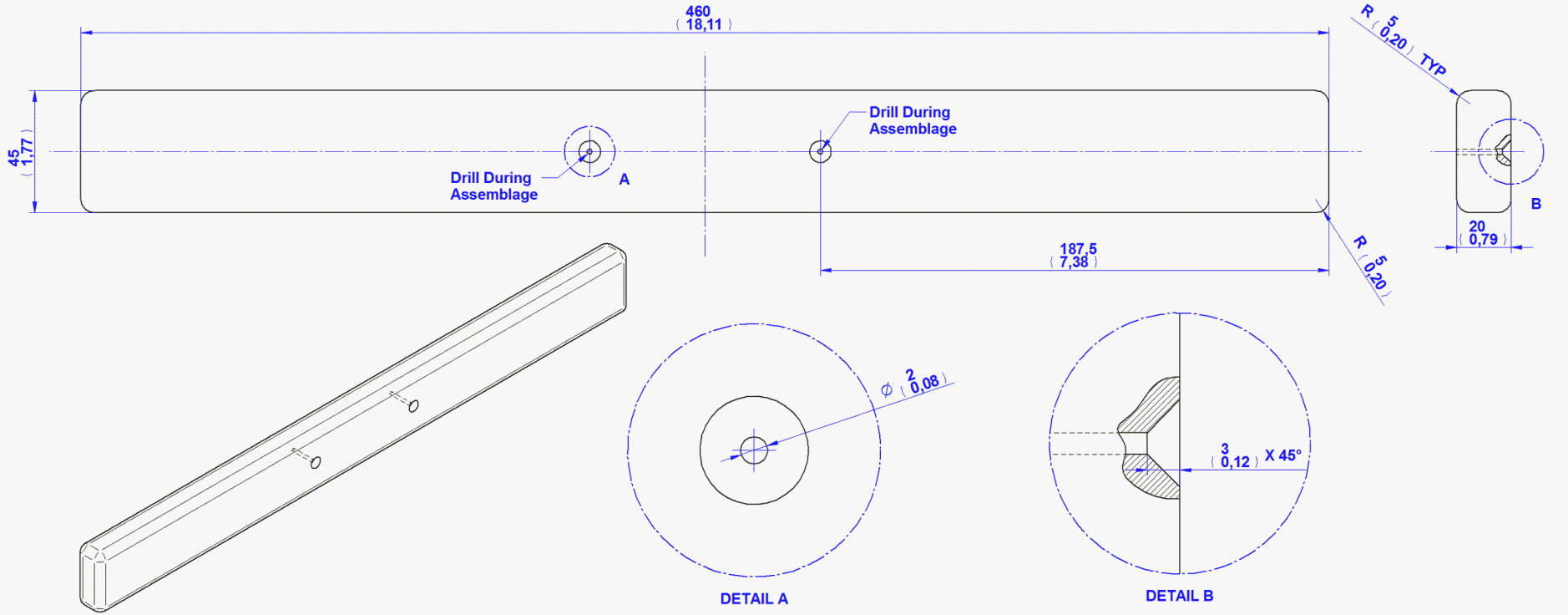

55
(2,17)
ϕ 6
(0,24)
2.12 Side Support

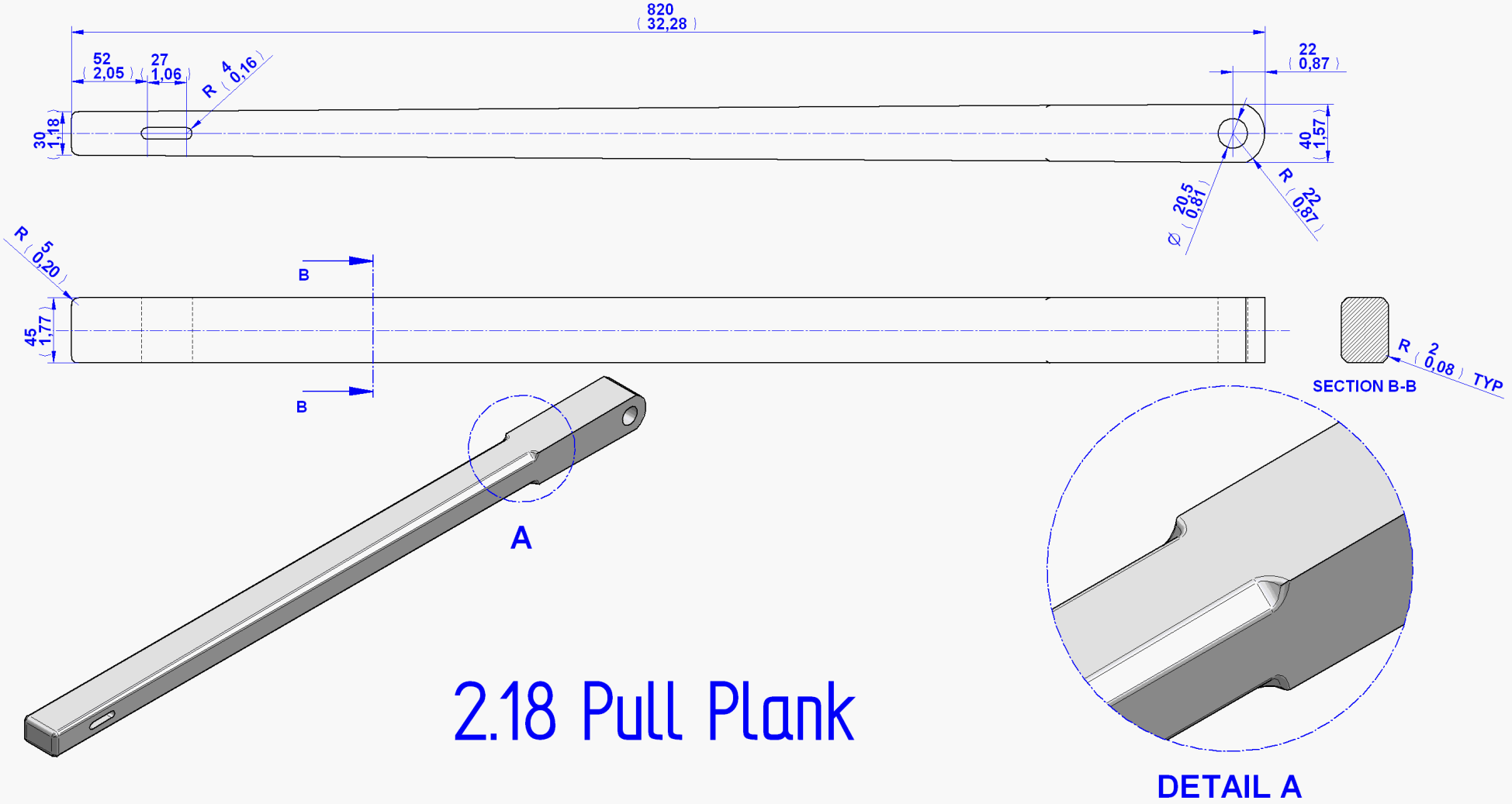


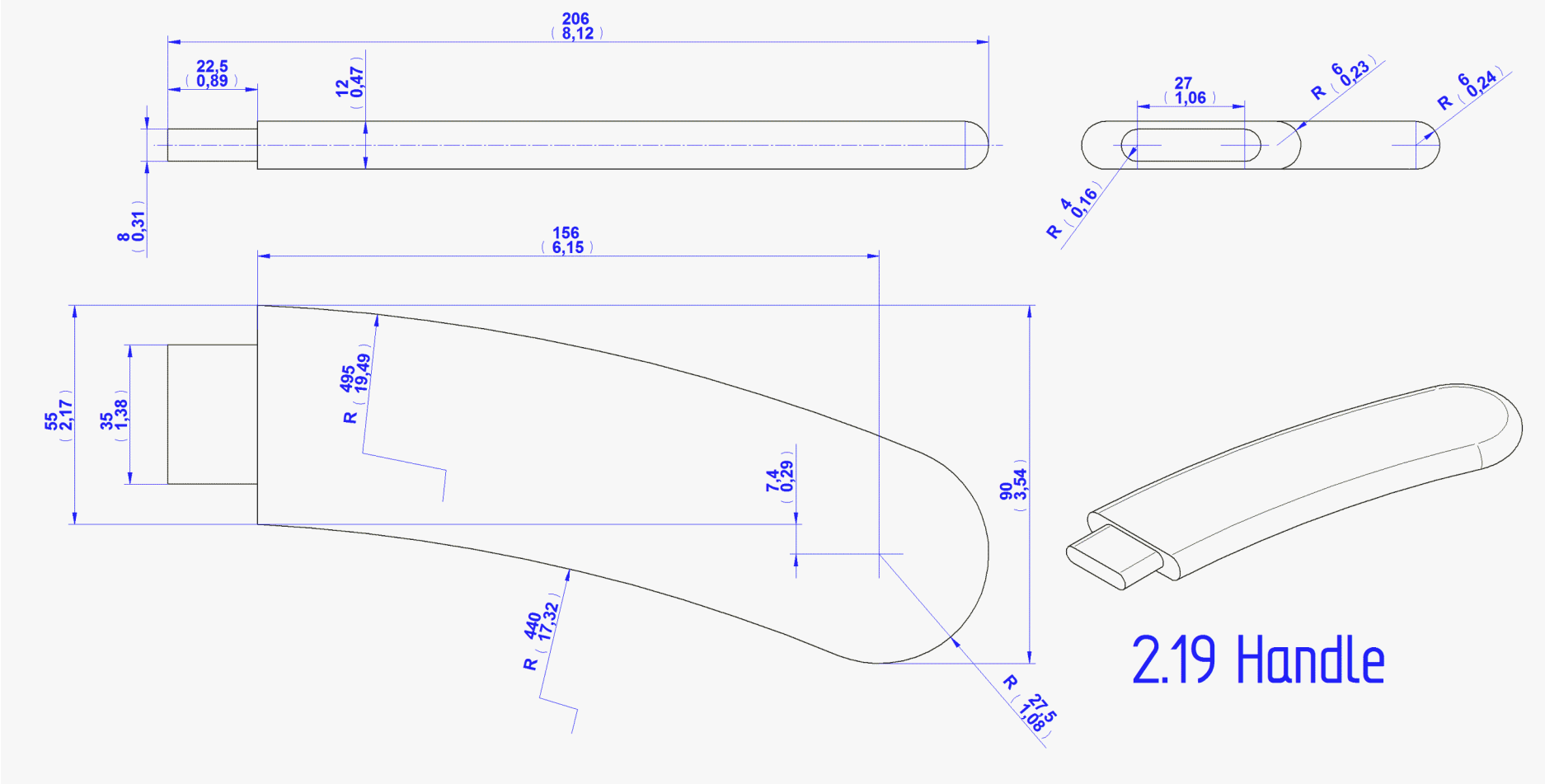
2.15 Curved Base Plank

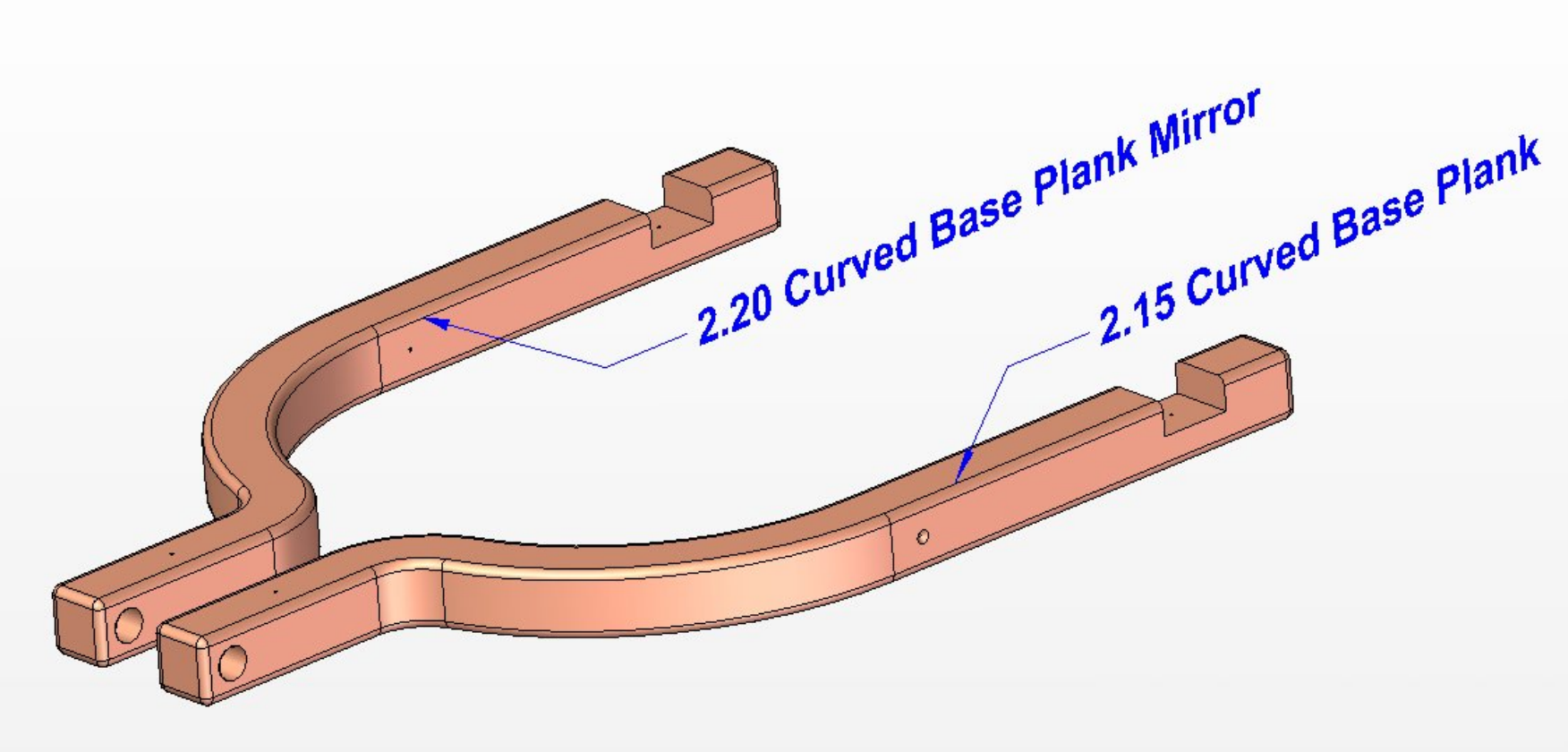

520
(20,47)
50
(1,97)
20
(0,79)
45
(1,77)
A
Drill During
Assemblage
Drill During
Assemblage
B
2
(0,08)
3
(0,12)
X 45°
DETAIL A
DETAIL B
2.16 Back Base Plank

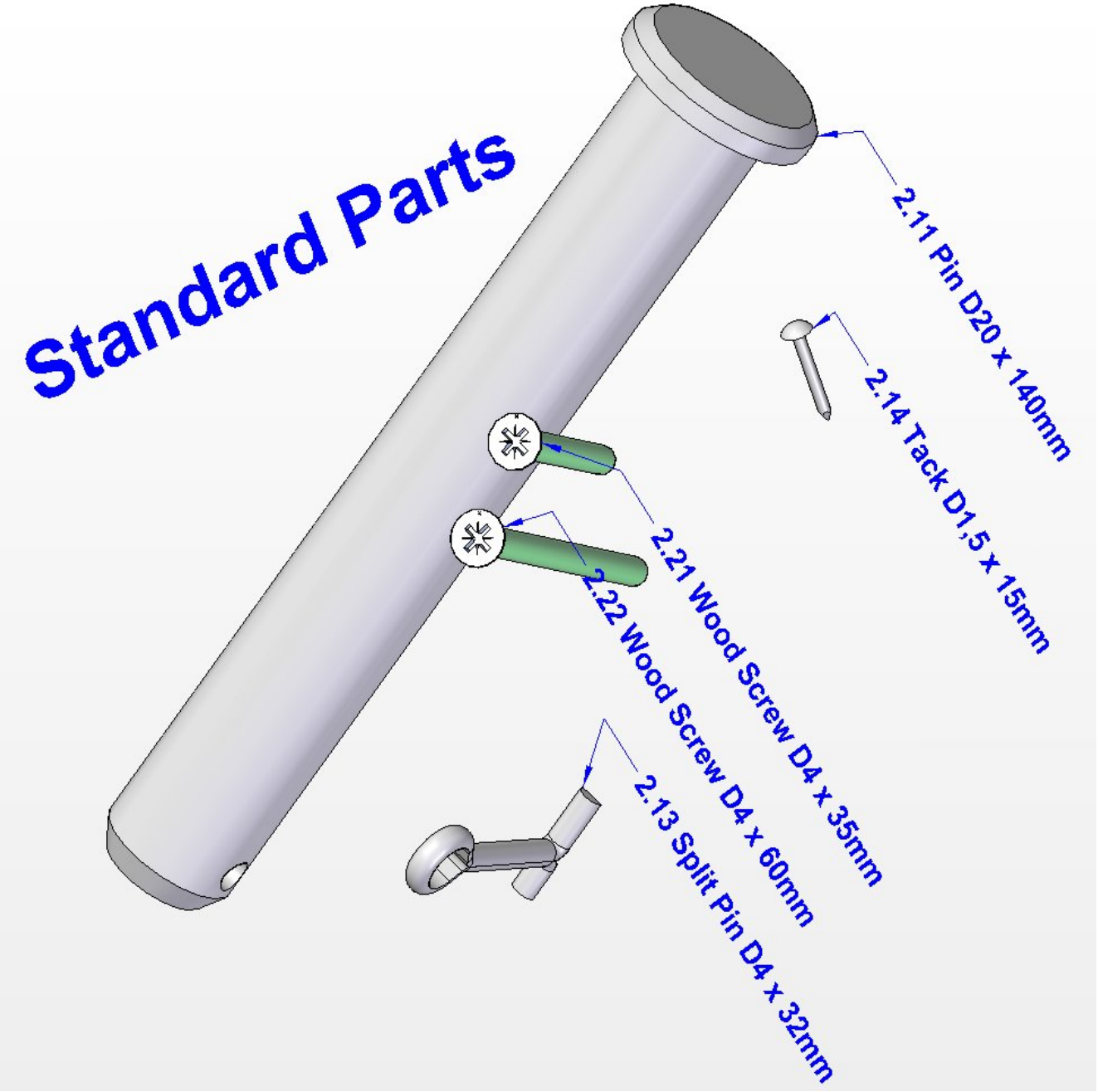
2.17 Front Base Plank




820
32,28
52
2,05
27
1,06
R 4
0,16
22
0,87
30
1,18
40
1,57
Ø 20,5
0,81
R 22
0,87
R 5
0,20
B
B
45
1,77
SECTION B-B
R 2
0,08 TYP
A
2.18 Pull Plank
DETAIL A

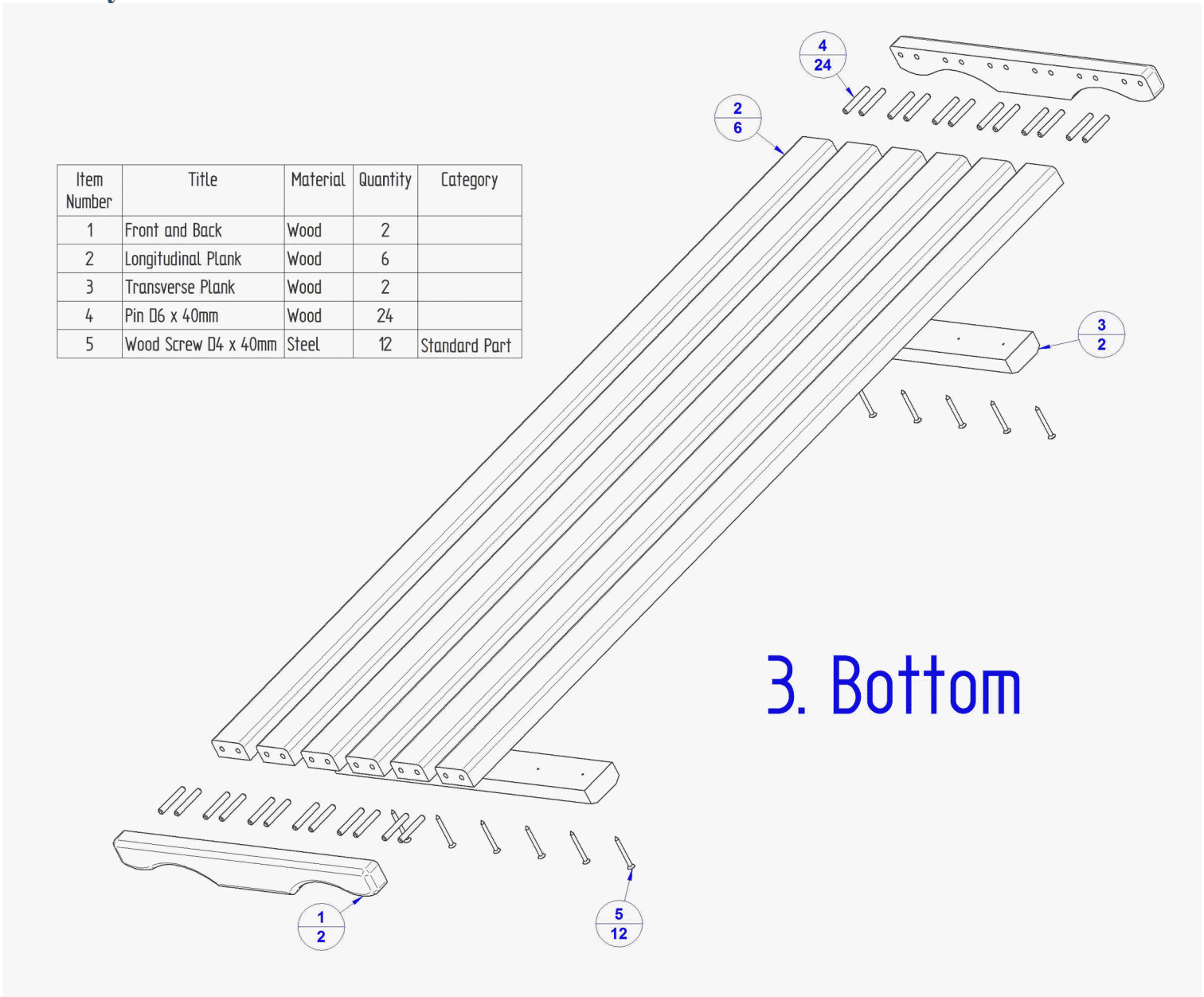

206
8,12
22,5
0,89
12
0,47
8
0,31
27
1,06
R 6
0,23
R 6
0,24
R 4
0,16
156
6,15
55
2,17
35
1,38
R 495
19,49
7,4
0,29
90
3,54
R 440
17,32
R 27,5
1,08
2.19 Handle


2.20 Curved Base Plank Mirror
2.15 Curved Base Plank

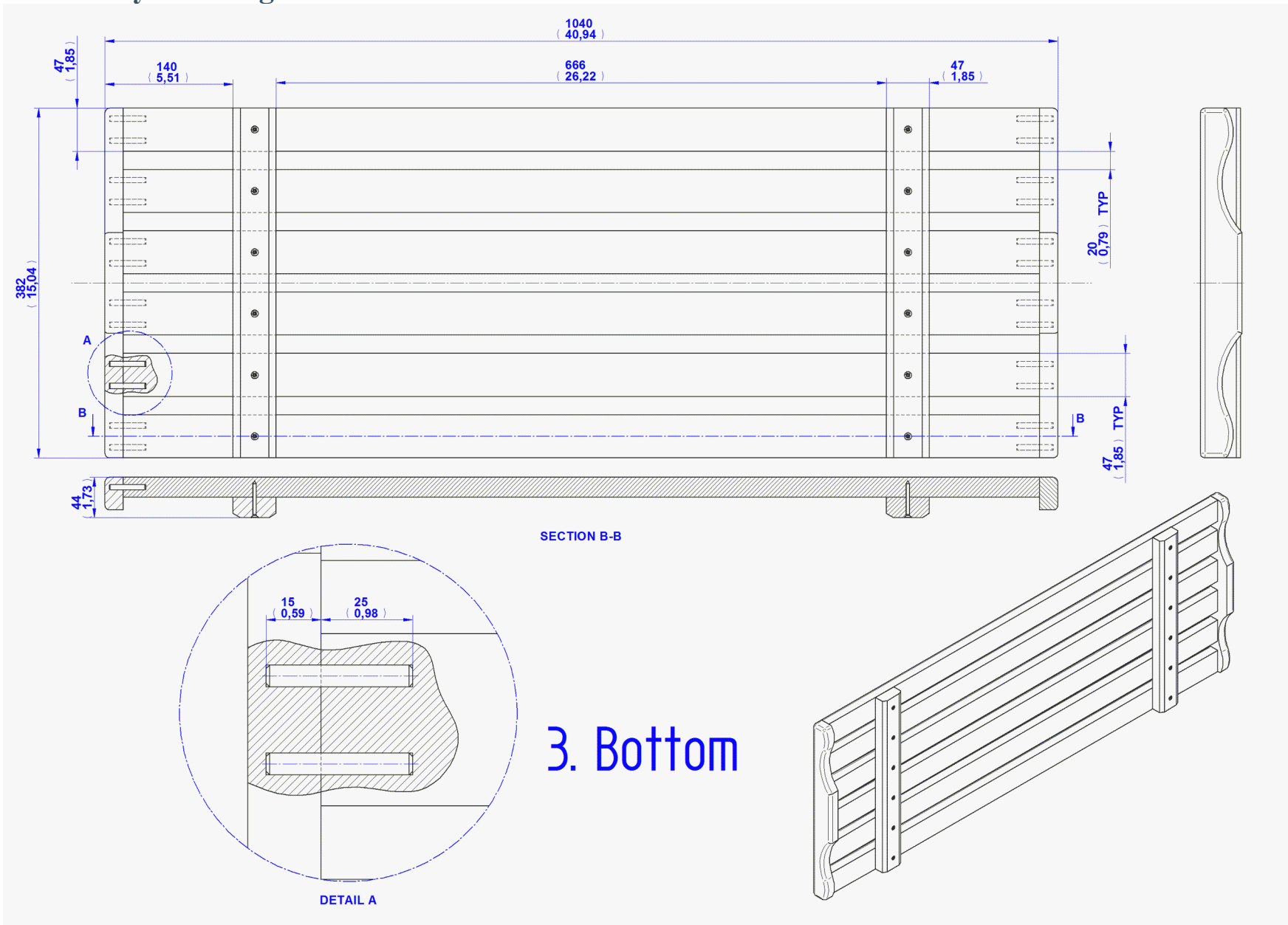

Standard Parts
2.11 Pin D20 x 140mm
2.14 Tack D1,5 x 15mm
2.21 Wood Screw D4 x 35mm
2.22 Wood Screw D4 x 60mm
2.13 Split Pin D4 x 32mm

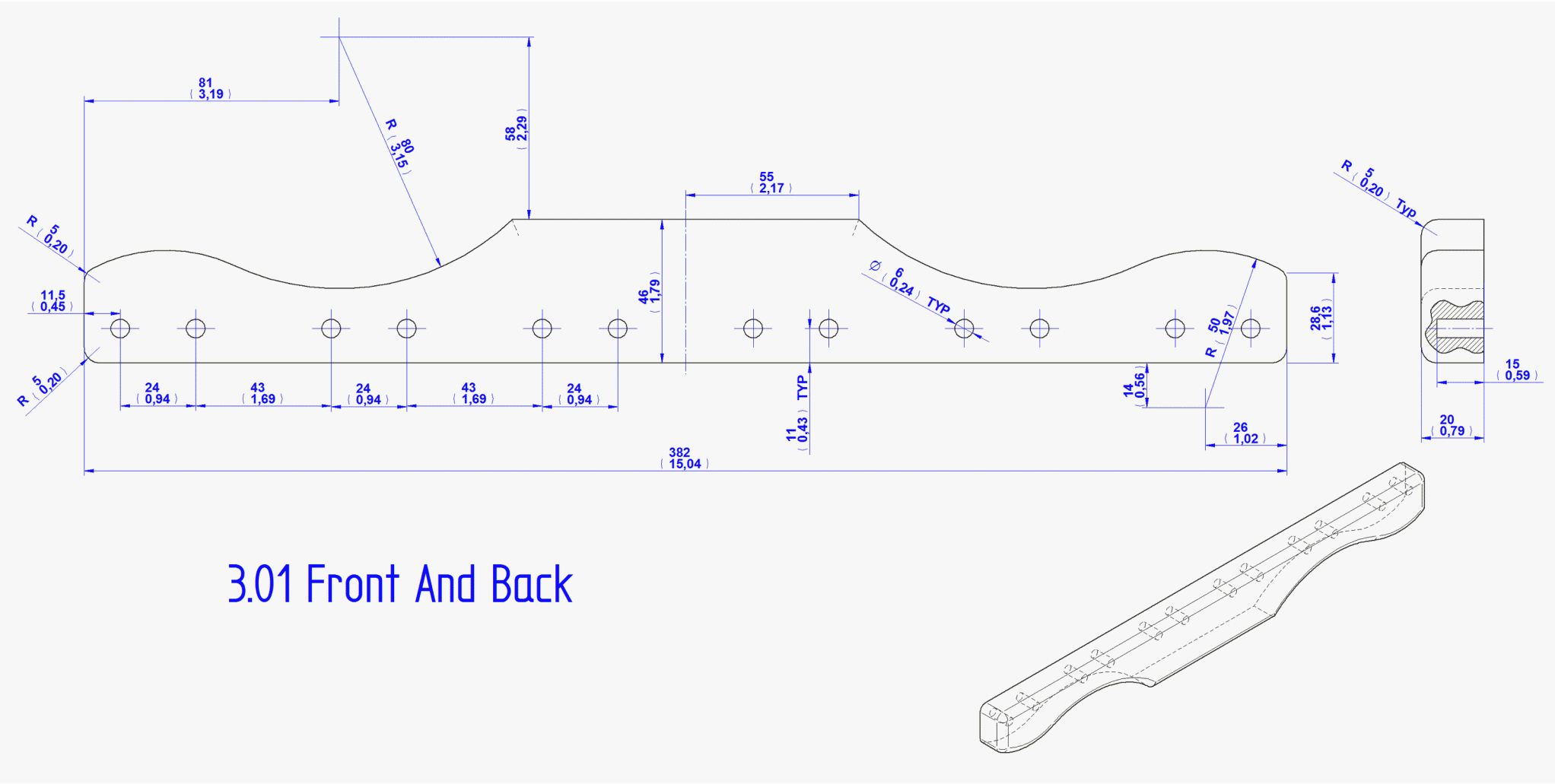
3. Bottom Subassembly - Parts List

Item Number	Title	Material	Quantity	Category
1	Front and Back	Wood	2	
2	Longitudinal Plank	Wood	6	
3	Transverse Plank	Wood	2	
4	Pin D6 x 40mm	Wood	24	
5	Wood Screw D4 x 40mm	Steel	12	Standard Part

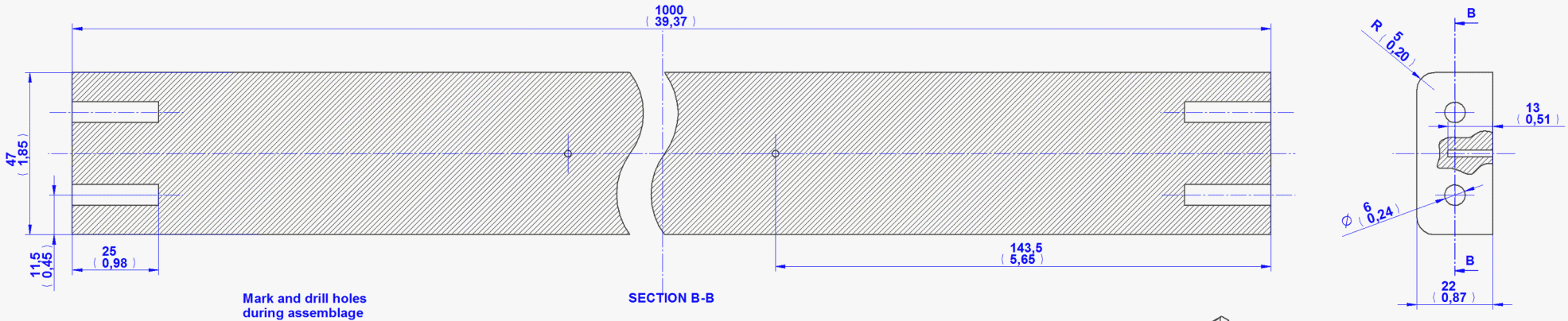


Bottom Subassembly Drawing

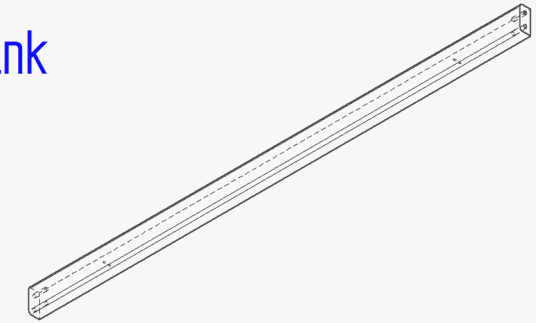


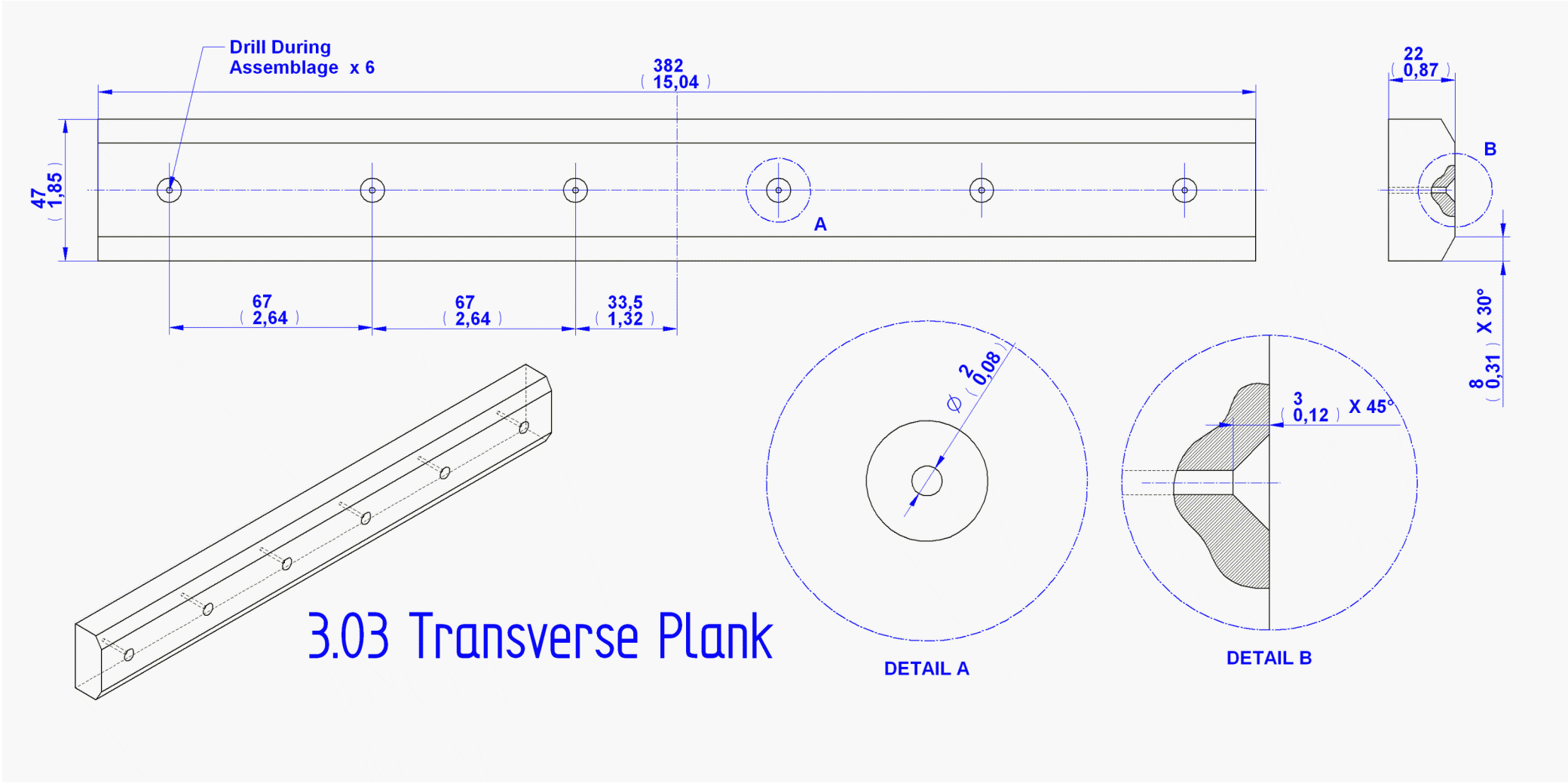


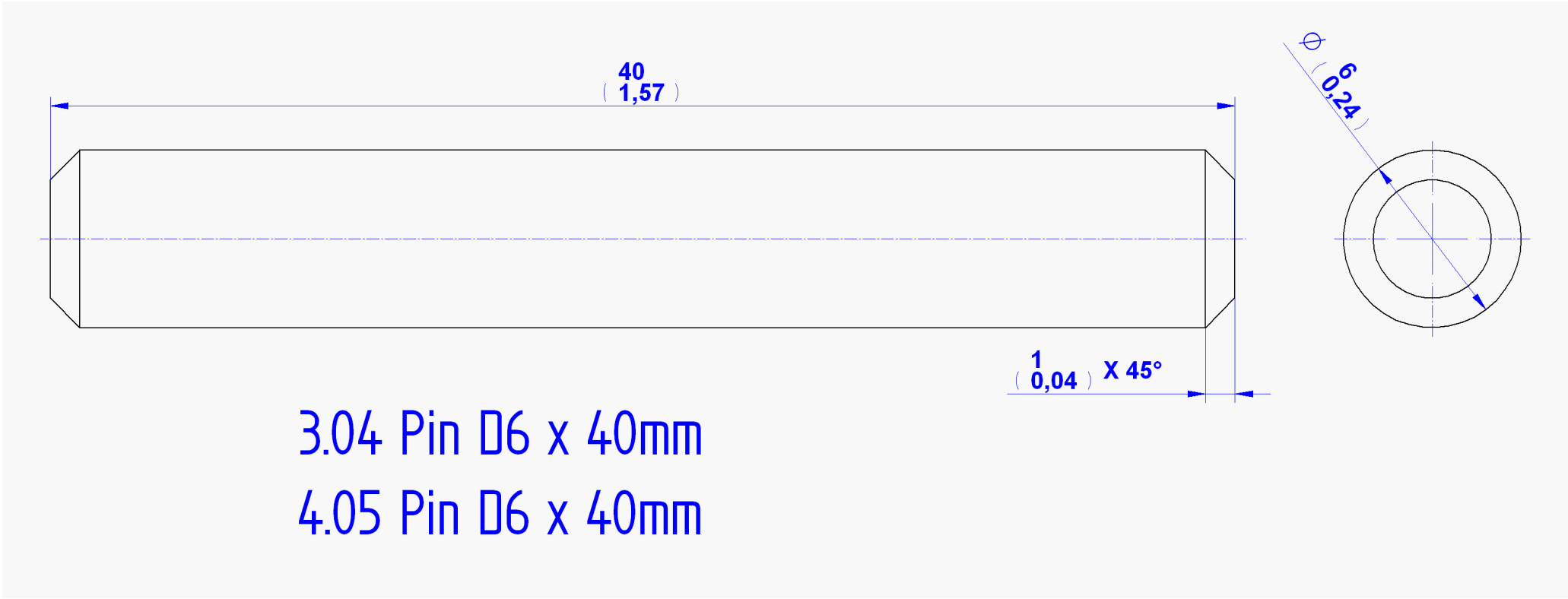
3.01 Front And Back



3.02 Longitudinal Plank

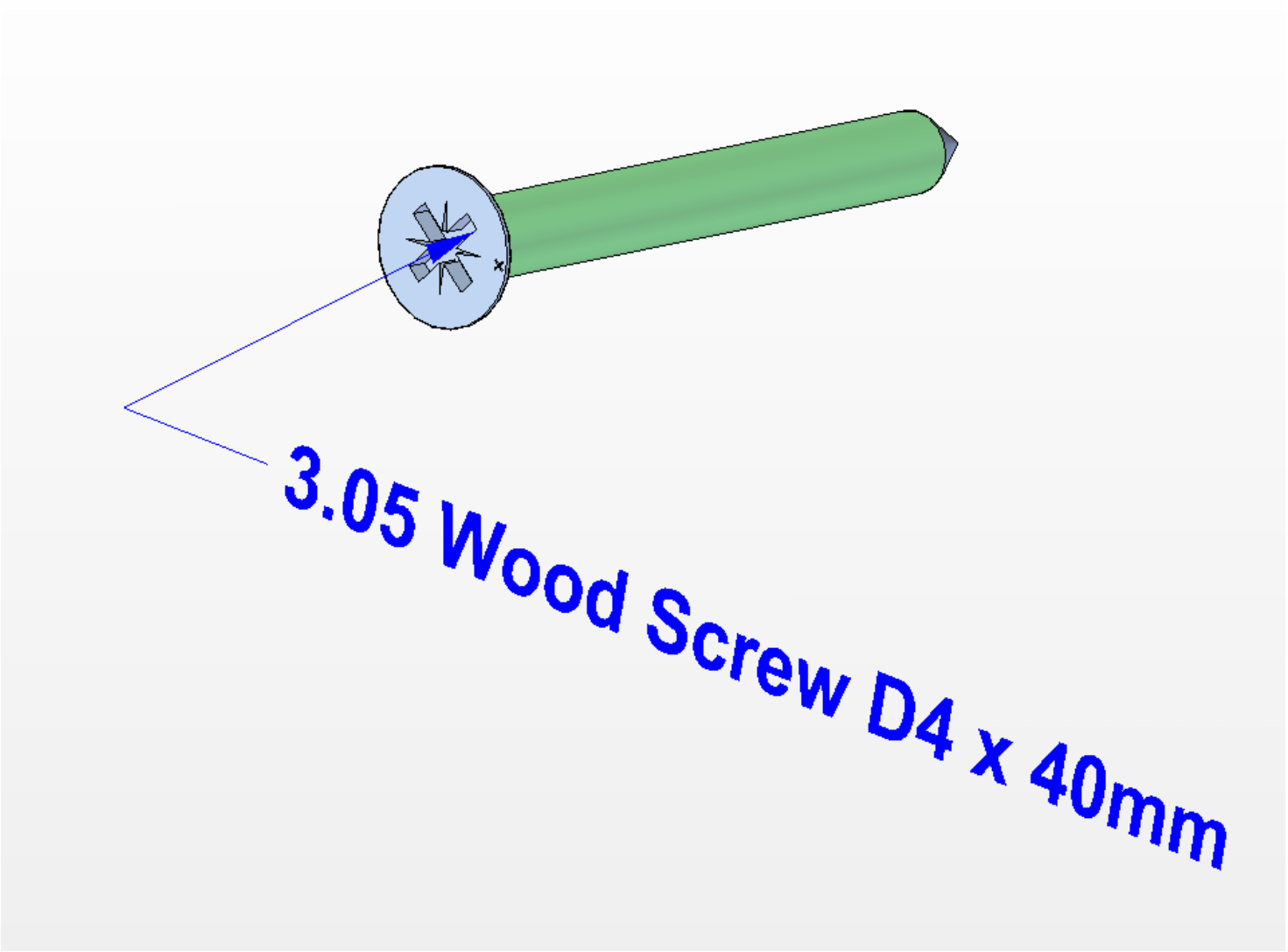



Drill During
Assemblage x 6
382
(15,04)
47
(1,85)
67
(2,64)
67
(2,64)
33,5
(1,32)
A
22
(0,87)
B
8
(0,31)
X 30°
Ø 2
(0,08)
3
(0,12)
X 45°
DETAIL A
DETAIL B
3.03 Transverse Plank

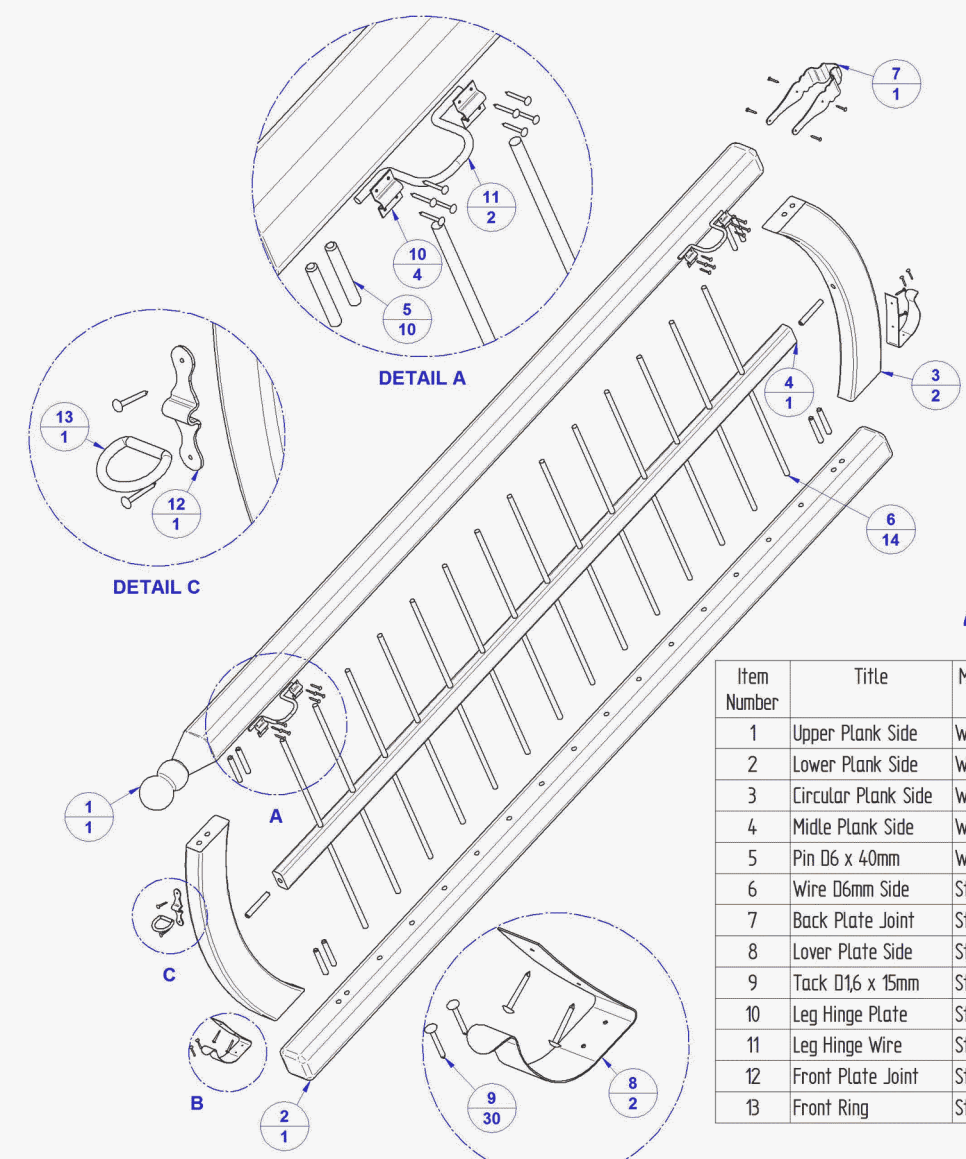


3.04 Pin D6 x 40mm

4.05 Pin D6 x 40mm


3.05 Wood Screw D4 x 40mm

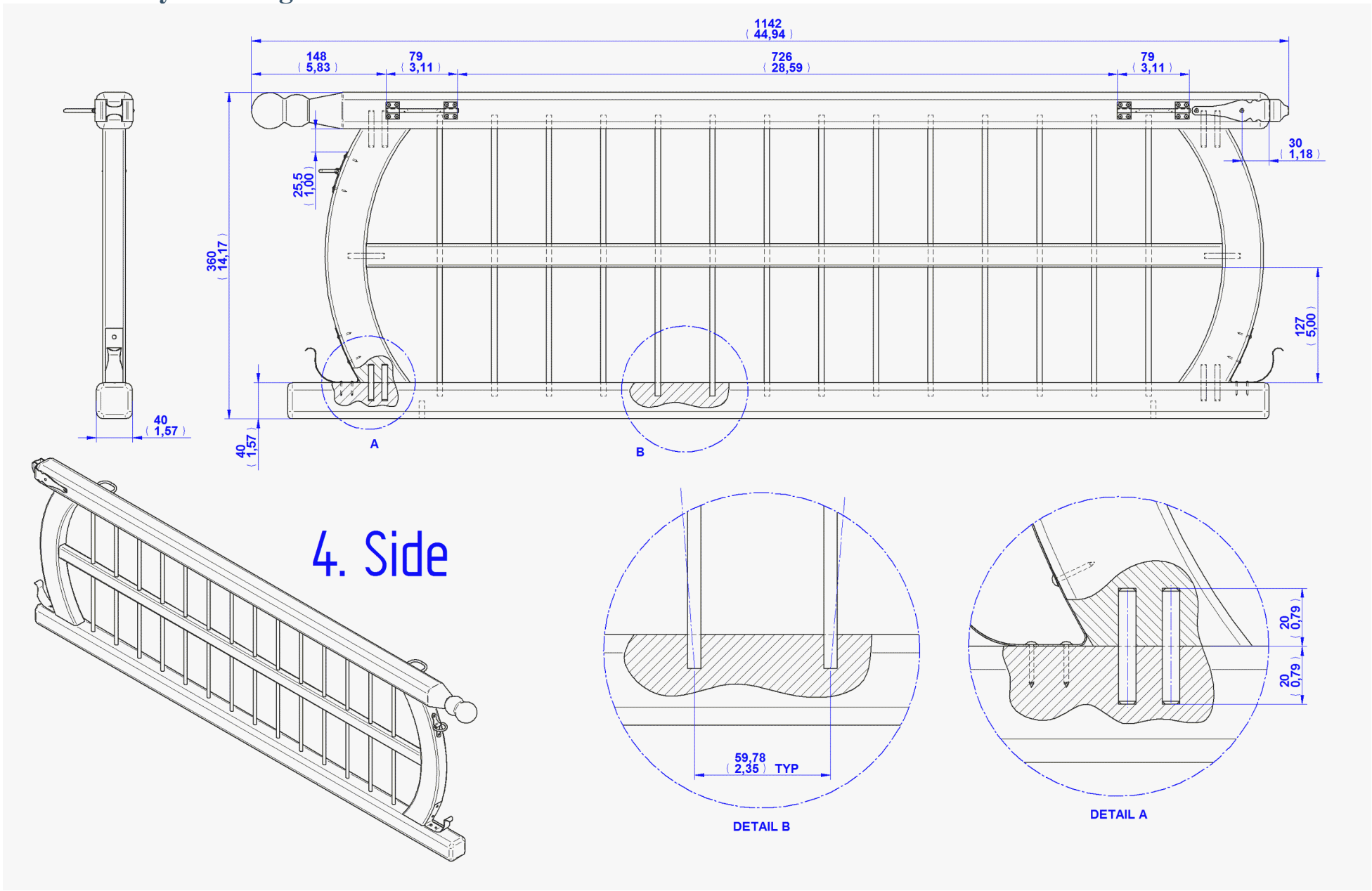
4. Side Subassembly - Parts List

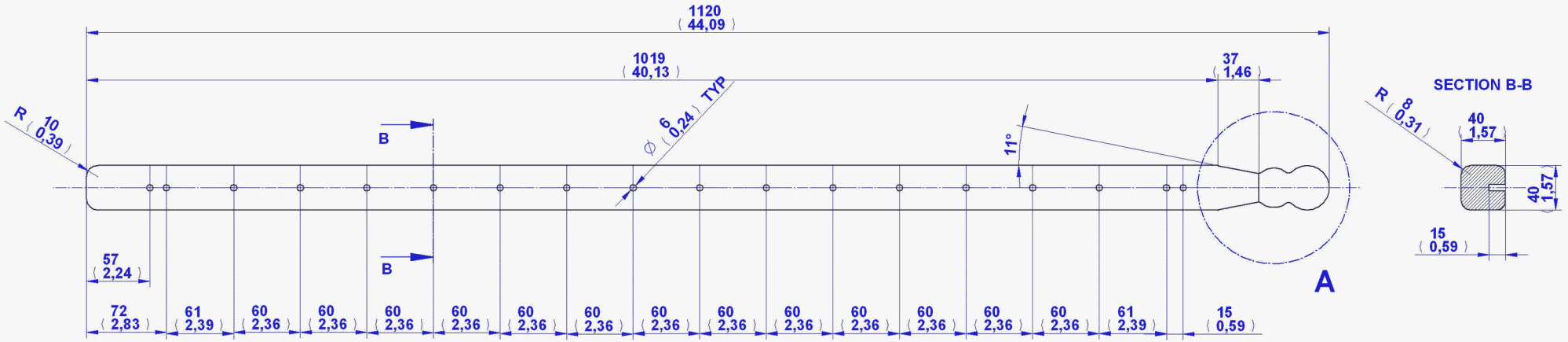


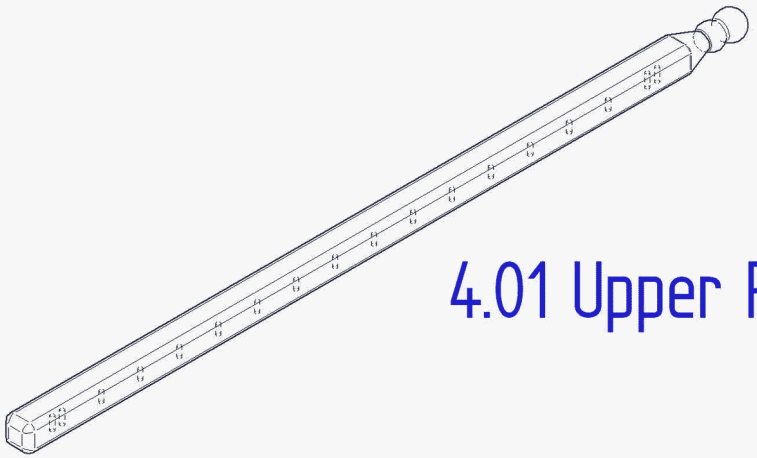
4. Side

Item Number	Title	Material	Quantity	Category
1	Upper Plank Side	Wood	1	
2	Lower Plank Side	Wood	1	
3	Circular Plank Side	Wood	2	
4	Midle Plank Side	Wood	1	
5	Pin D6 x 40mm	Wood	10	
6	Wire D6mm Side	Steel	14	
7	Back Plate Joint	Steel	1	
8	Lover Plate Side	Steel	2	
9	Tack D1,6 x 15mm	Steel	30	Standard Part
10	Leg Hinge Plate	Steel	4	
11	Leg Hinge Wire	Steel	2	
12	Front Plate Joint	Steel	1	
13	Front Ring	Steel	1	Standard Part

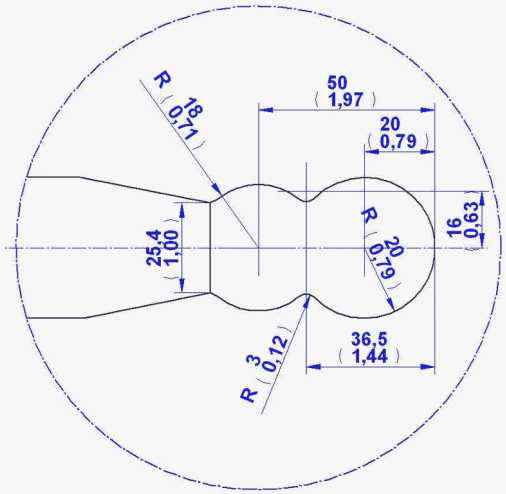
Side Subassembly Drawing



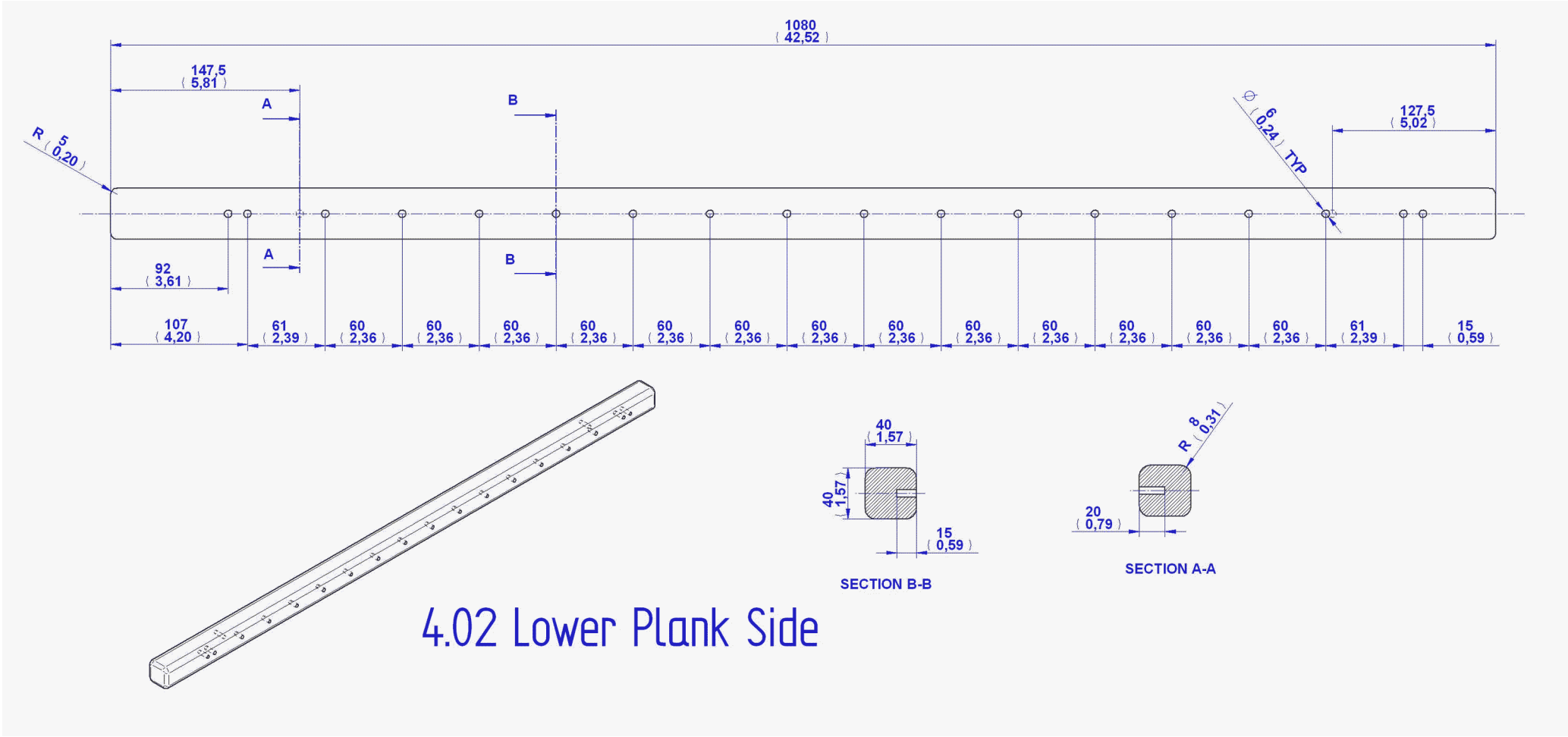




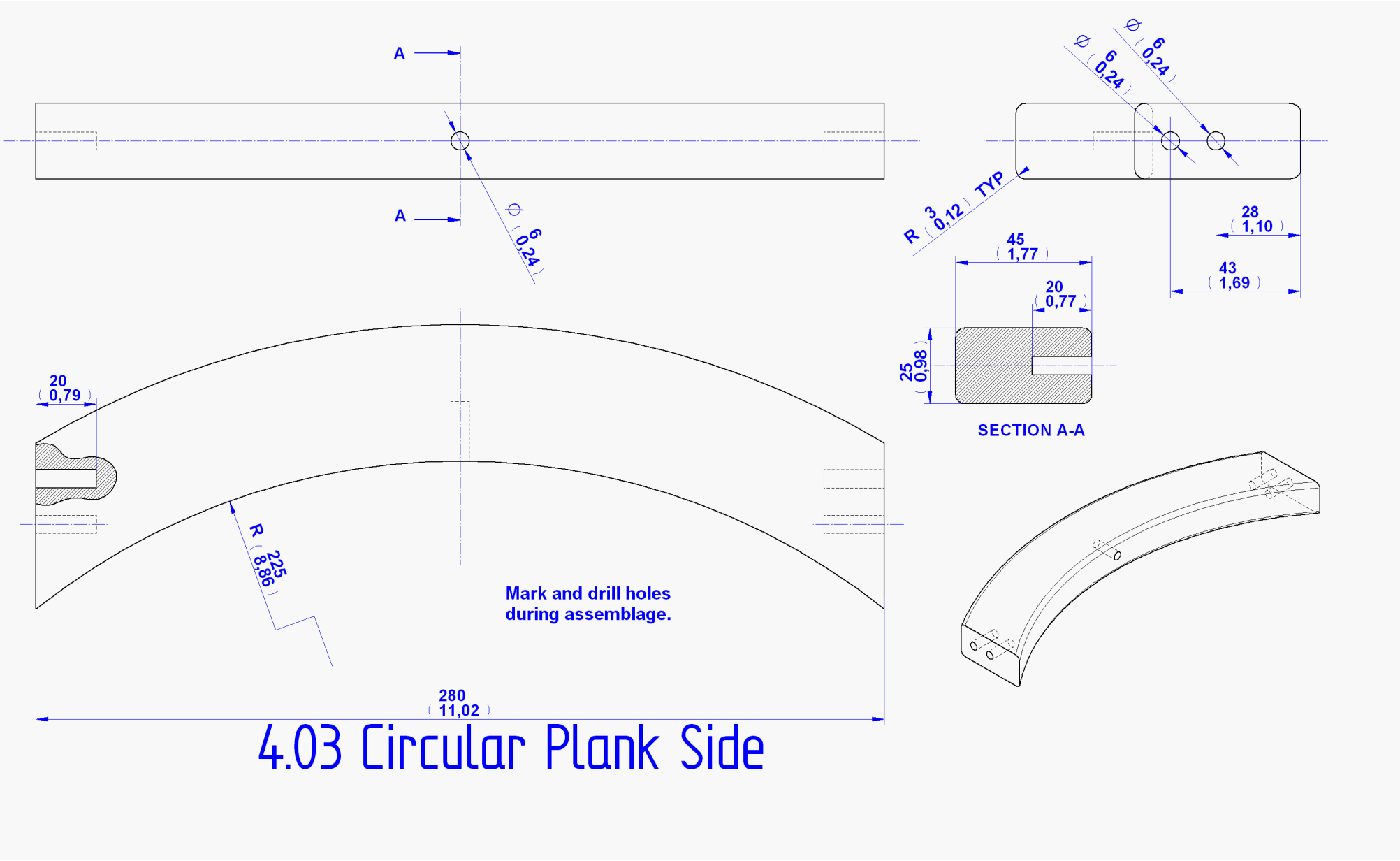
4.01 Upper Plank Side



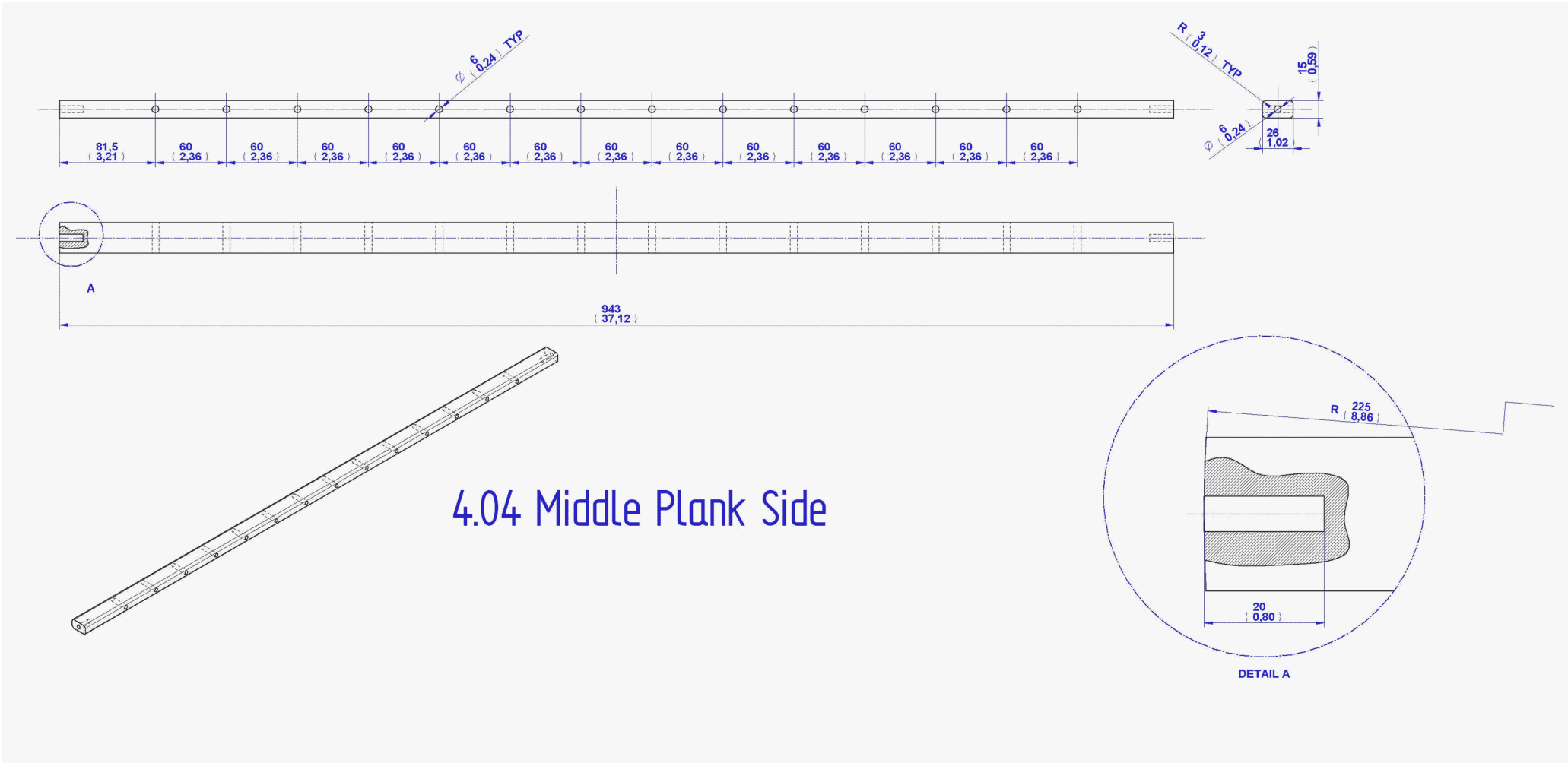
DETAIL A

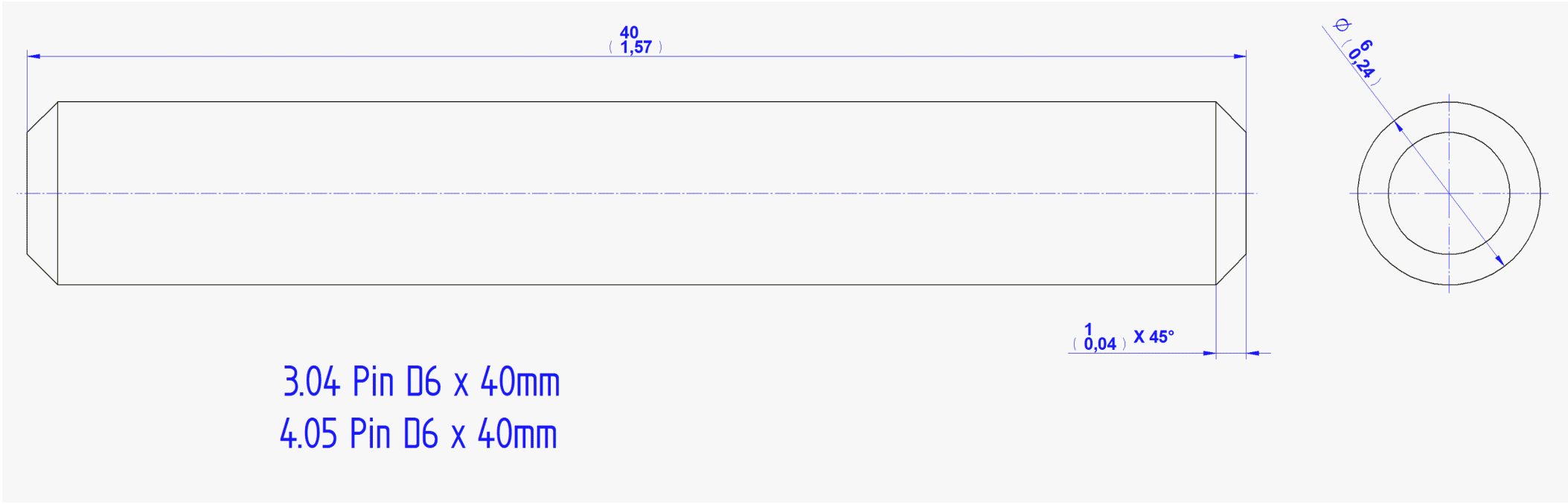


4.02 Lower Plank Side



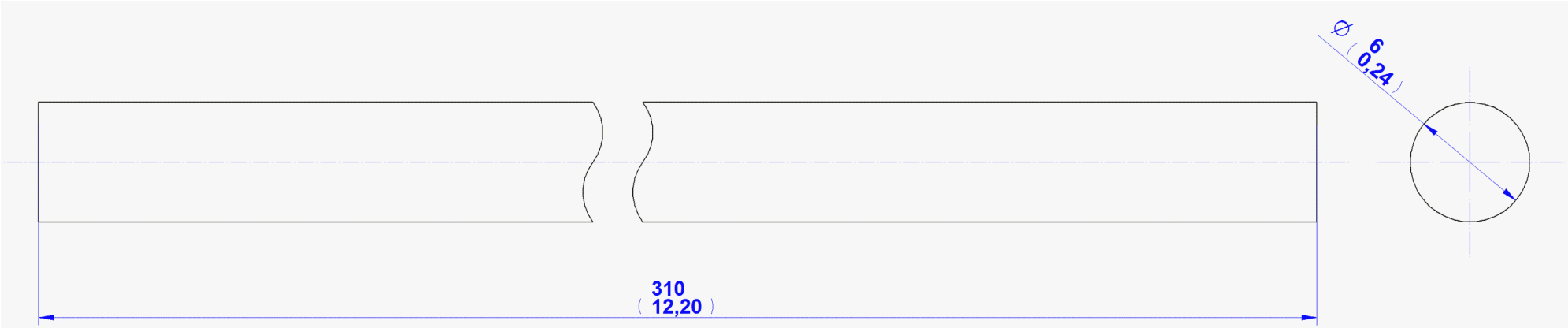
4.03 Circular Plank Side


Φ 6 (0,24) TYP
R 3 (0,12) TYP
15 (0,59)
Φ 6 (0,24)
26 (1,02)
81,5 (3,21)
60 (2,36)
A
943 (37,12)
4.04 Middle Plank Side
R 225 (8,86)
20 (0,80)
DETAIL A

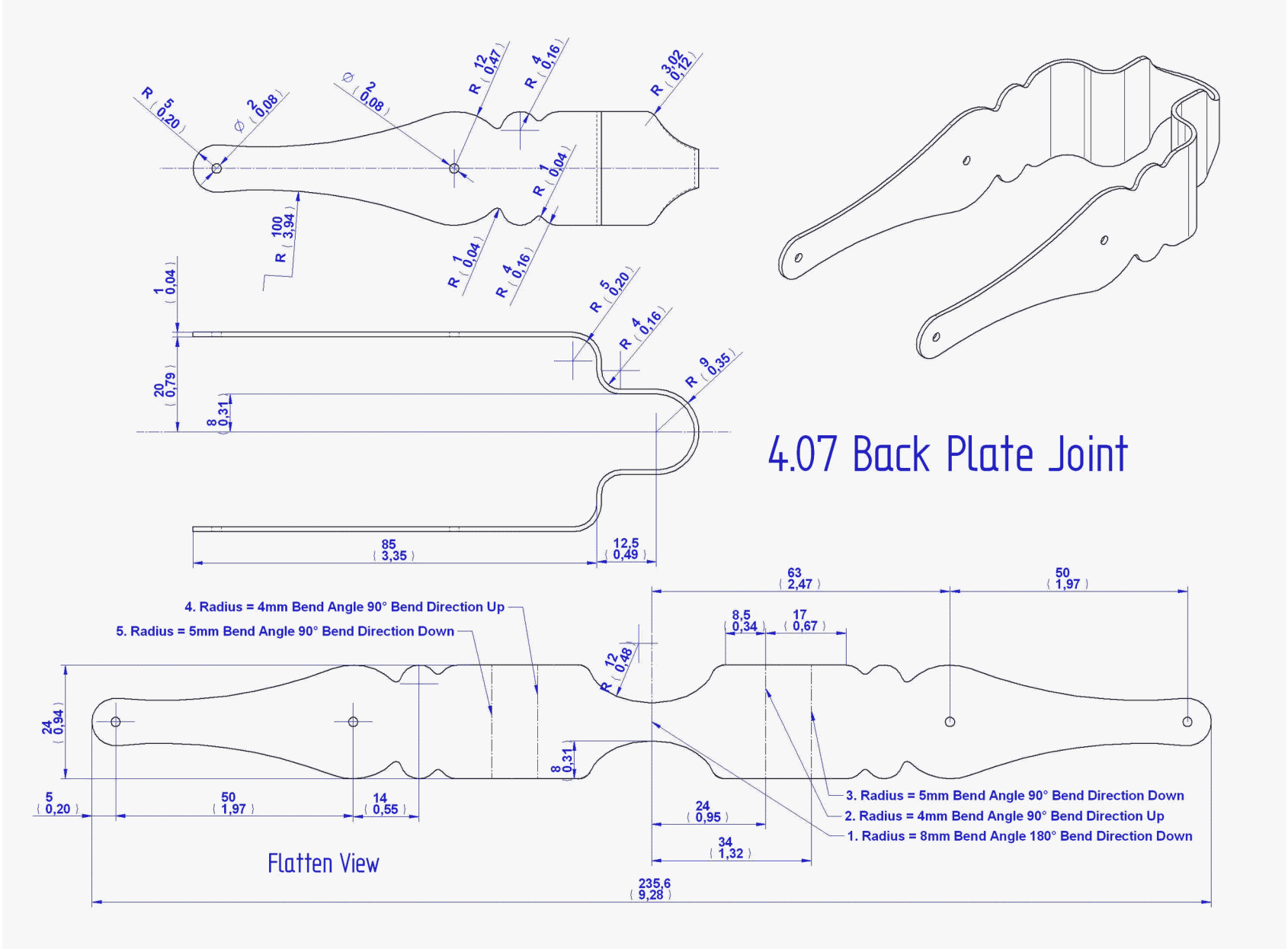


3.04 Pin D6 x 40mm

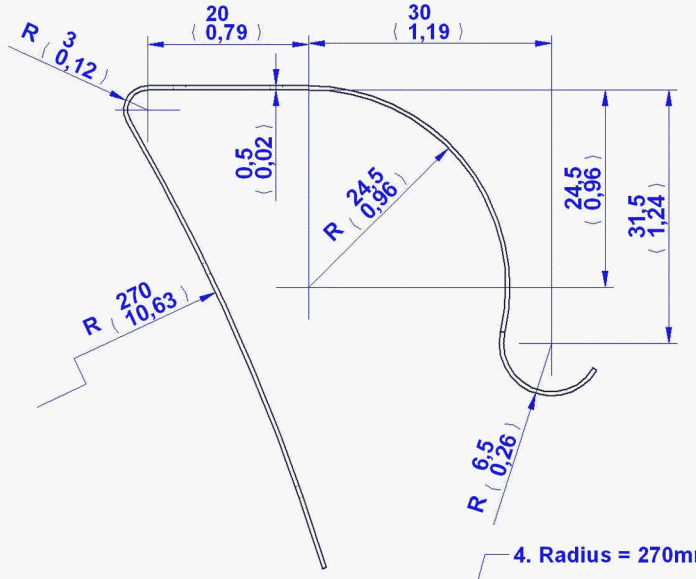
4.05 Pin D6 x 40mm

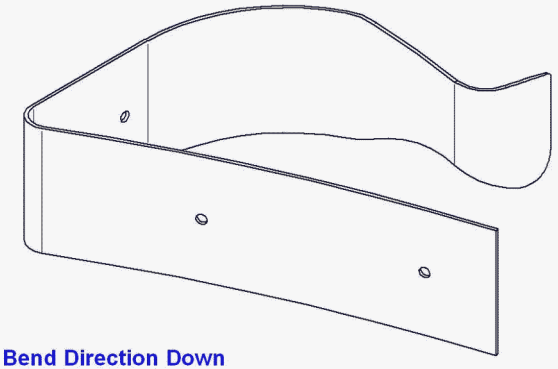


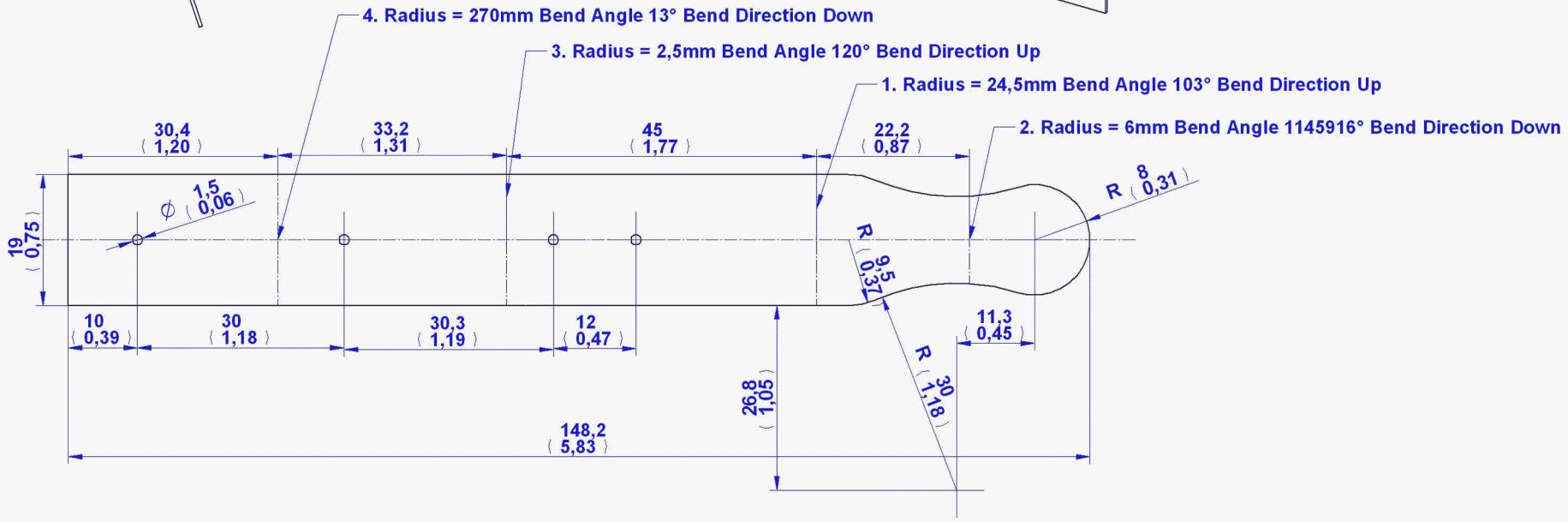
4.06 Wire D6mm Side

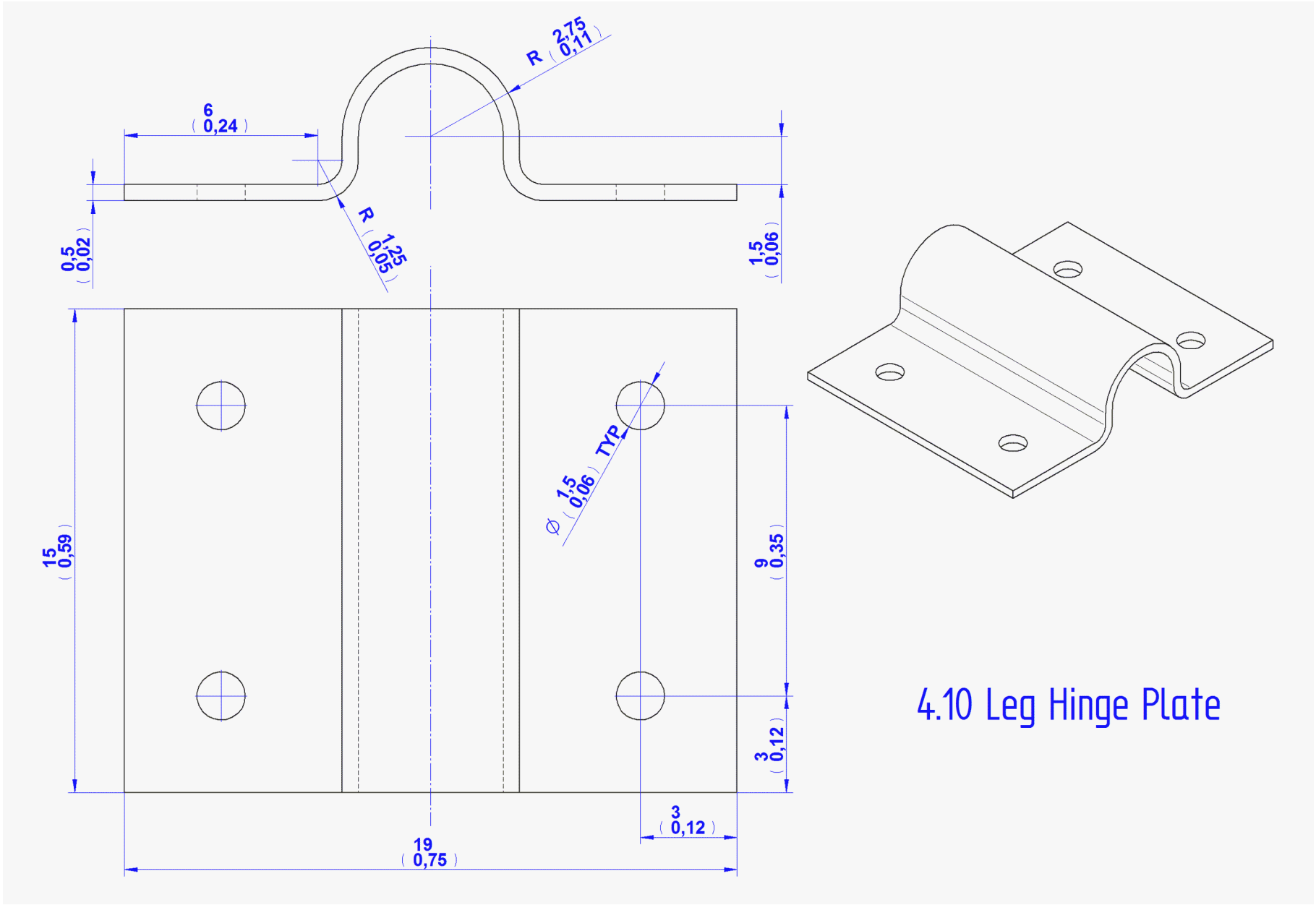

4.07 Back Plate Joint
4. Radius = 4mm Bend Angle 90° Bend Direction Up
5. Radius = 5mm Bend Angle 90° Bend Direction Down
3. Radius = 5mm Bend Angle 90° Bend Direction Down
2. Radius = 4mm Bend Angle 90° Bend Direction Up
1. Radius = 8mm Bend Angle 180° Bend Direction Down
Flatten View

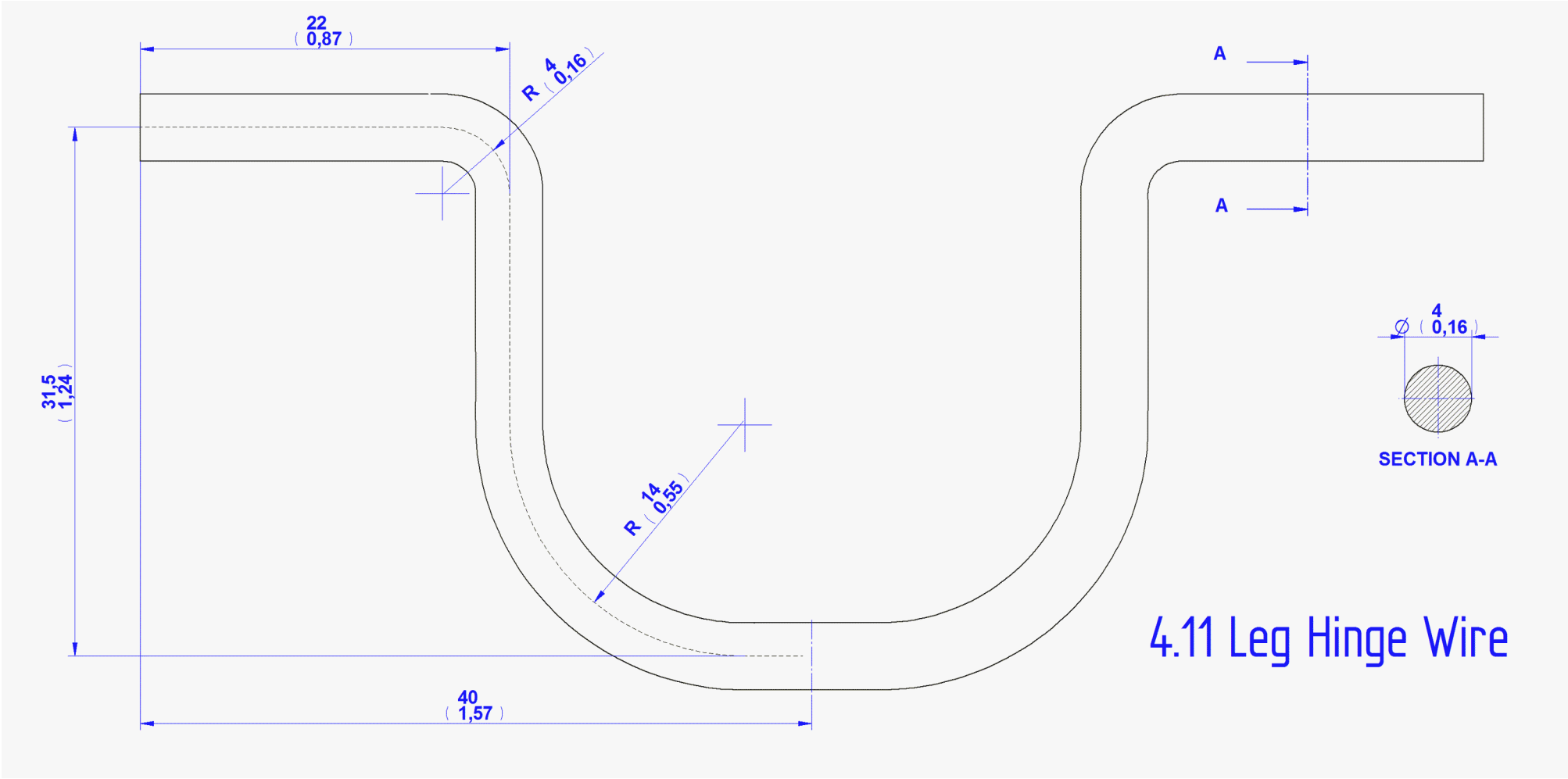
4.08 Lower Plate Side



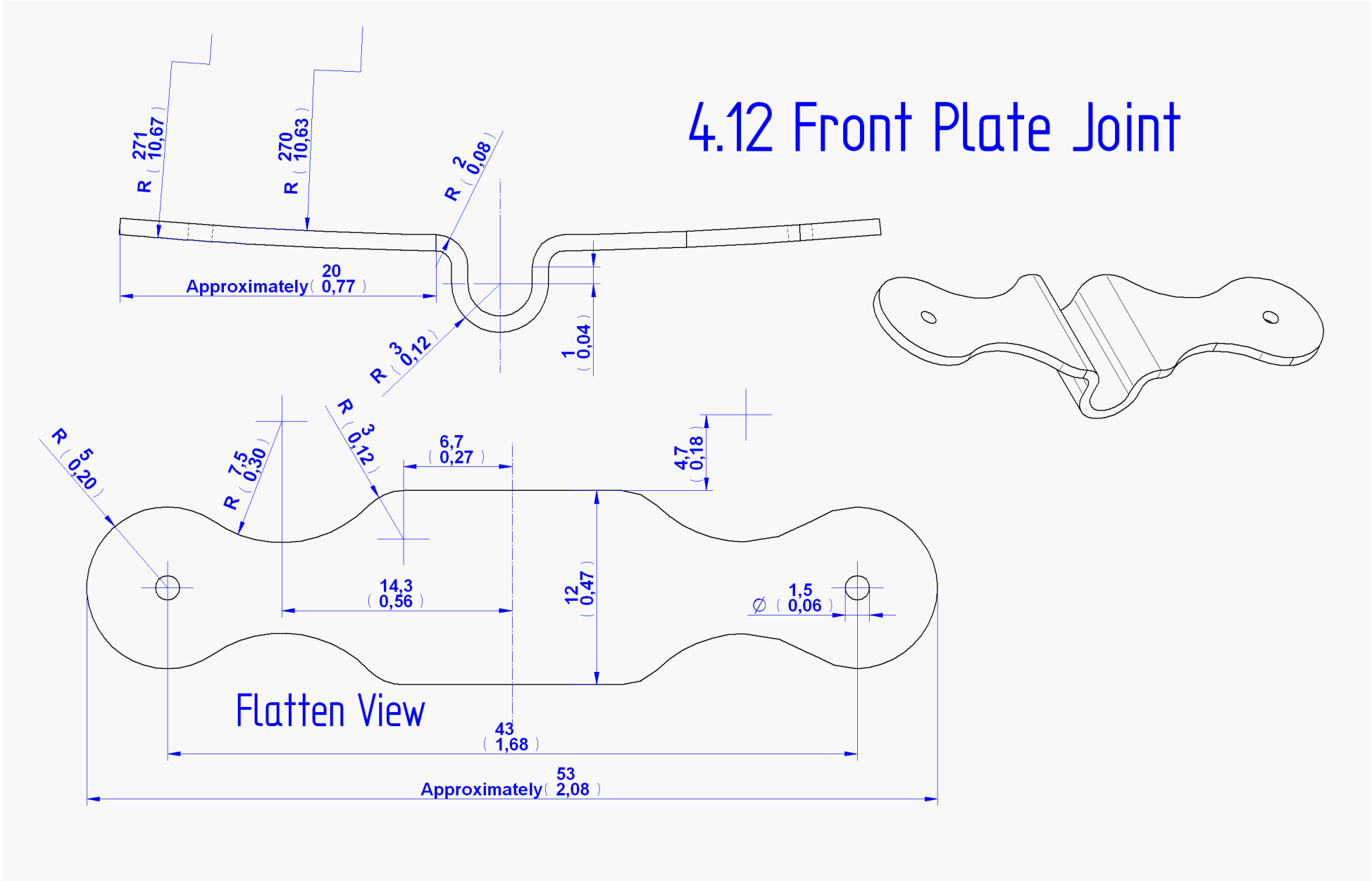


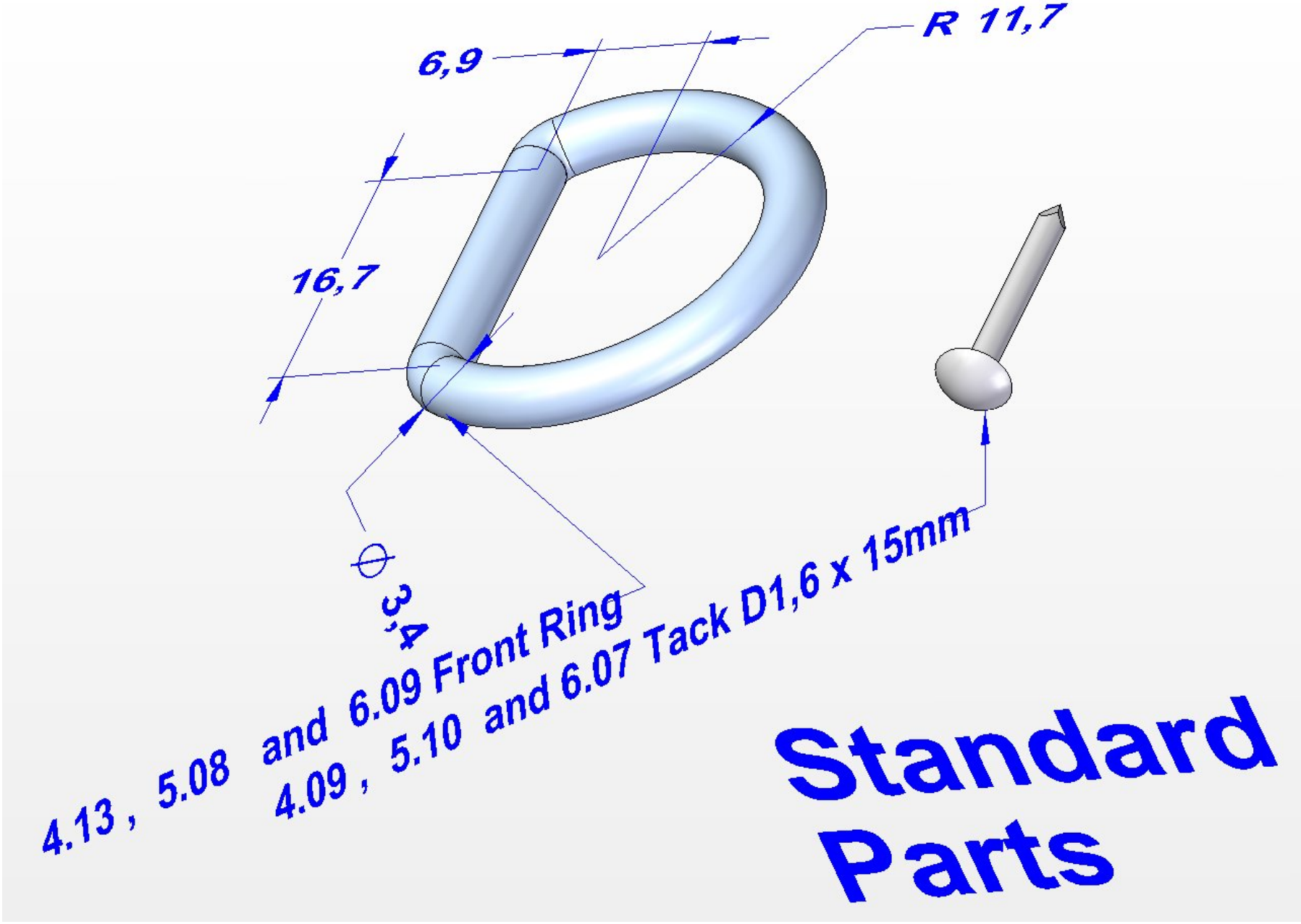



R 2,75 (0,11)
6 (0,24)
R 1,25 (0,05)
0,5 (0,02)
1,5 (0,06)
15 (0,59)
Ø 1,5 (0,06) TYP
9 (0,35)
3 (0,12)
3 (0,12)
19 (0,75)
4.10 Leg Hinge Plate

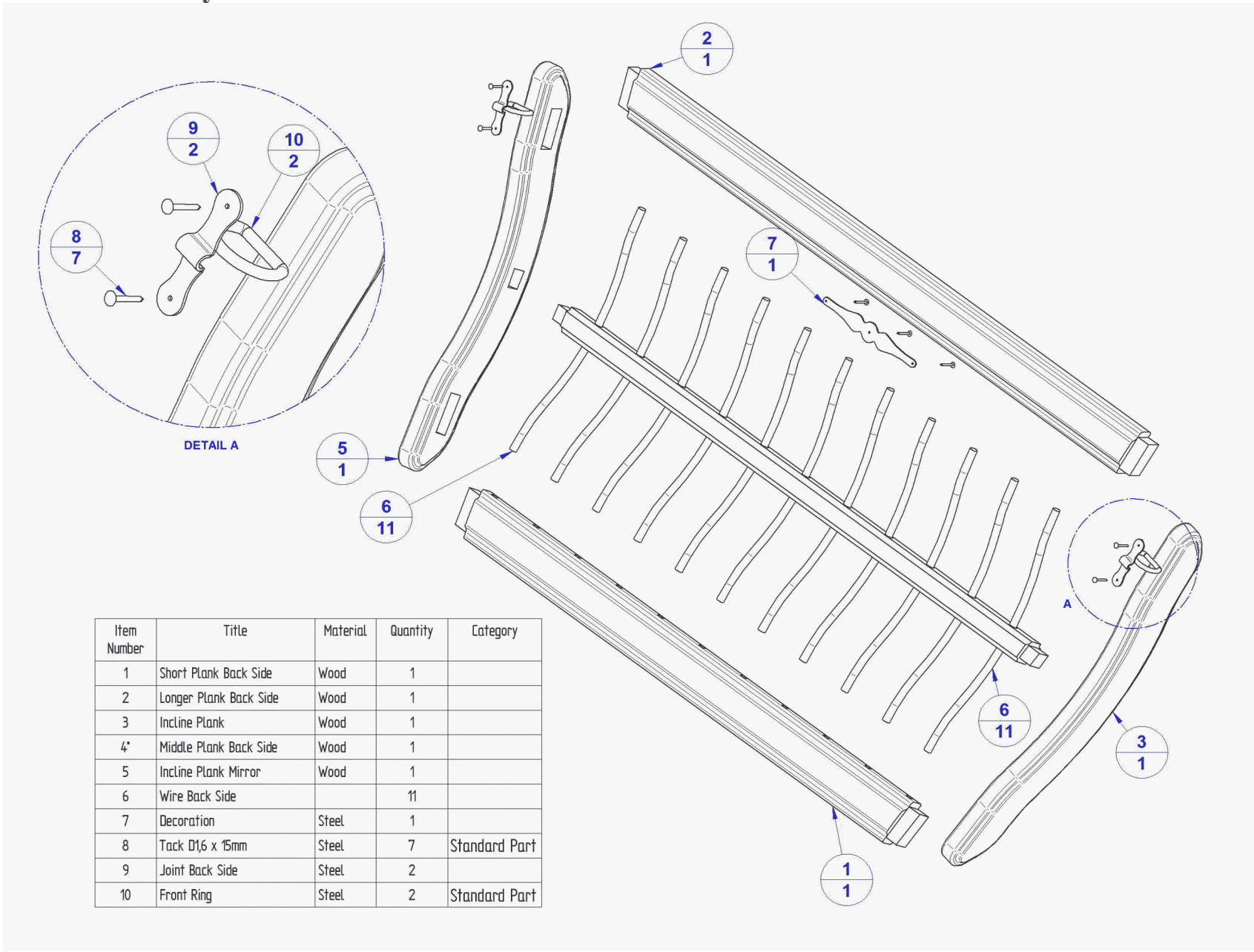

22
(0,87)
R 4
(0,16)
A
A
31,5
(1,24)
R 14
(0,55)
40
(1,57)
4
∅ (0,16)
SECTION A-A
4.11 Leg Hinge Wire

4.12 Front Plate Joint



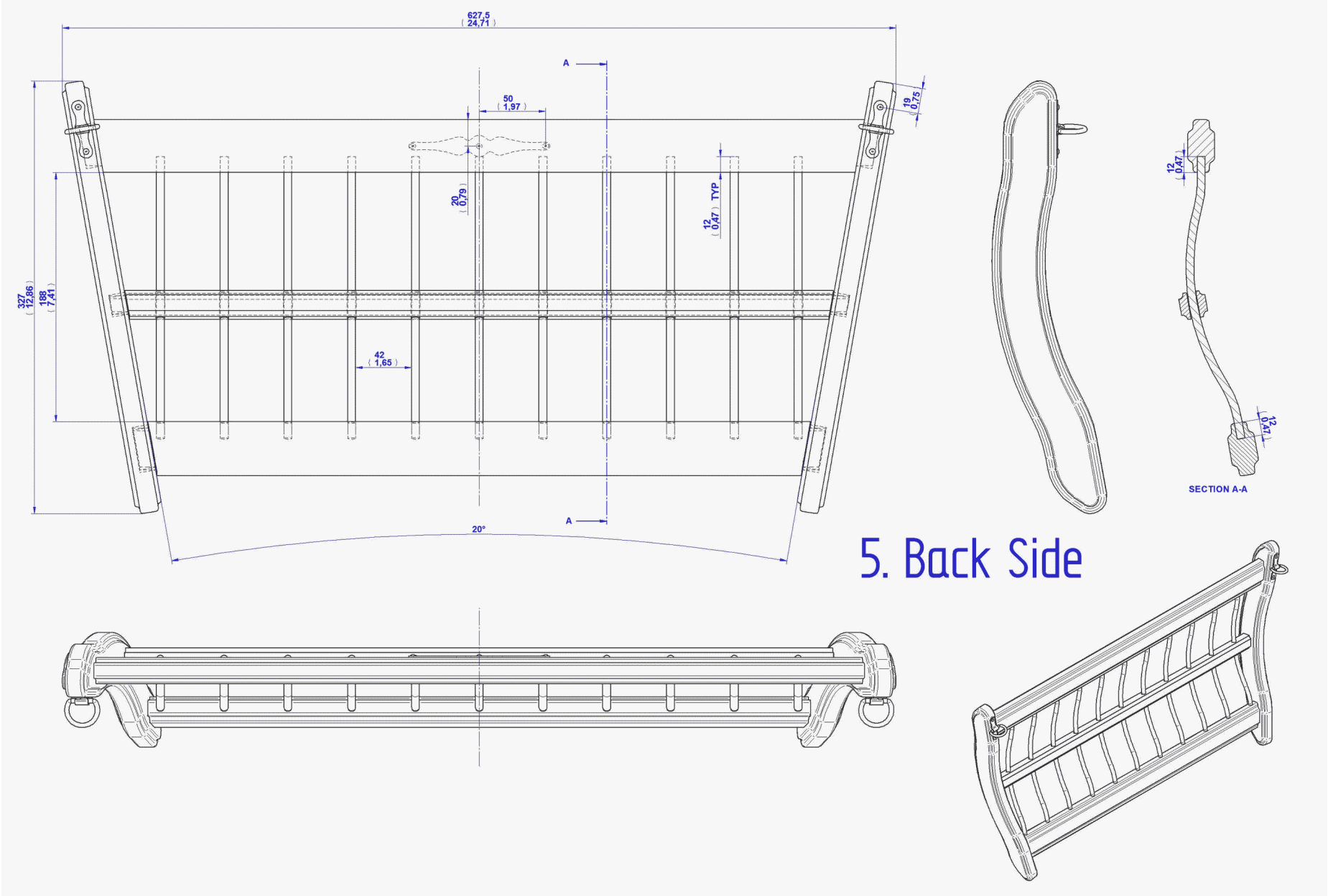

6,9
R 11,7
16,7
3,4
4.13 , 5.08 and 6.09 Front Ring
4.09 , 5.10 and 6.07 Tack D1,6 x 15mm
Standard Parts

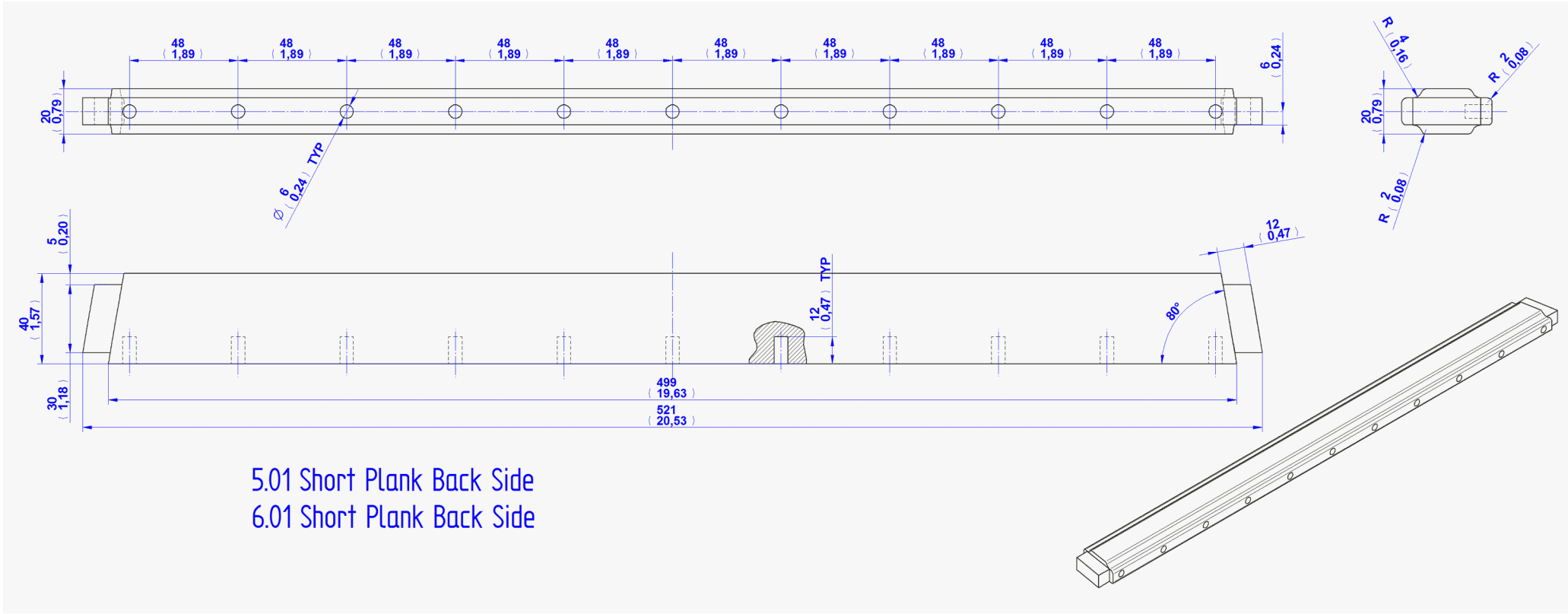
5. Back Side Subassembly - Parts List



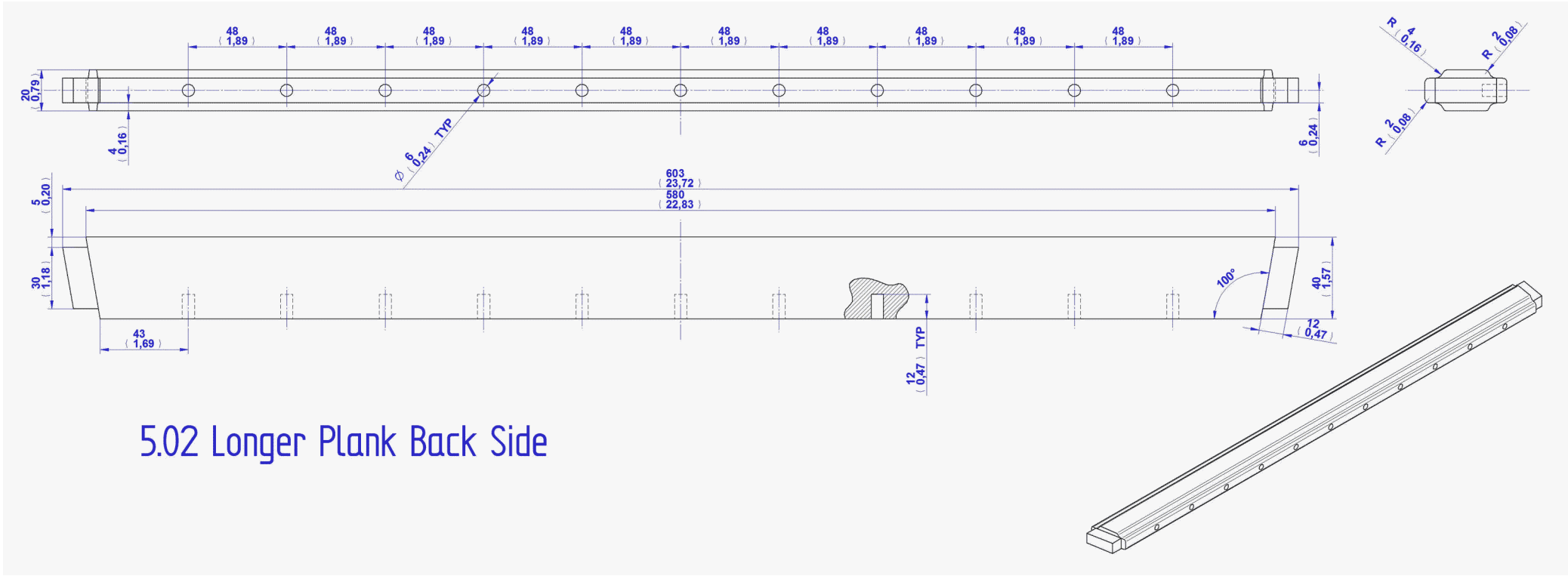
Item Number	Title	Material	Quantity	Category
1	Short Plank Back Side	Wood	1	
2	Longer Plank Back Side	Wood	1	
3	Incline Plank	Wood	1	
4*	Middle Plank Back Side	Wood	1	
5	Incline Plank Mirror	Wood	1	
6	Wire Back Side		11	
7	Decoration	Steel	1	
8	Tack D1,6 x 15mm	Steel	7	Standard Part
9	Joint Back Side	Steel	2	
10	Front Ring	Steel	2	Standard Part

Back Side Subassembly Drawing

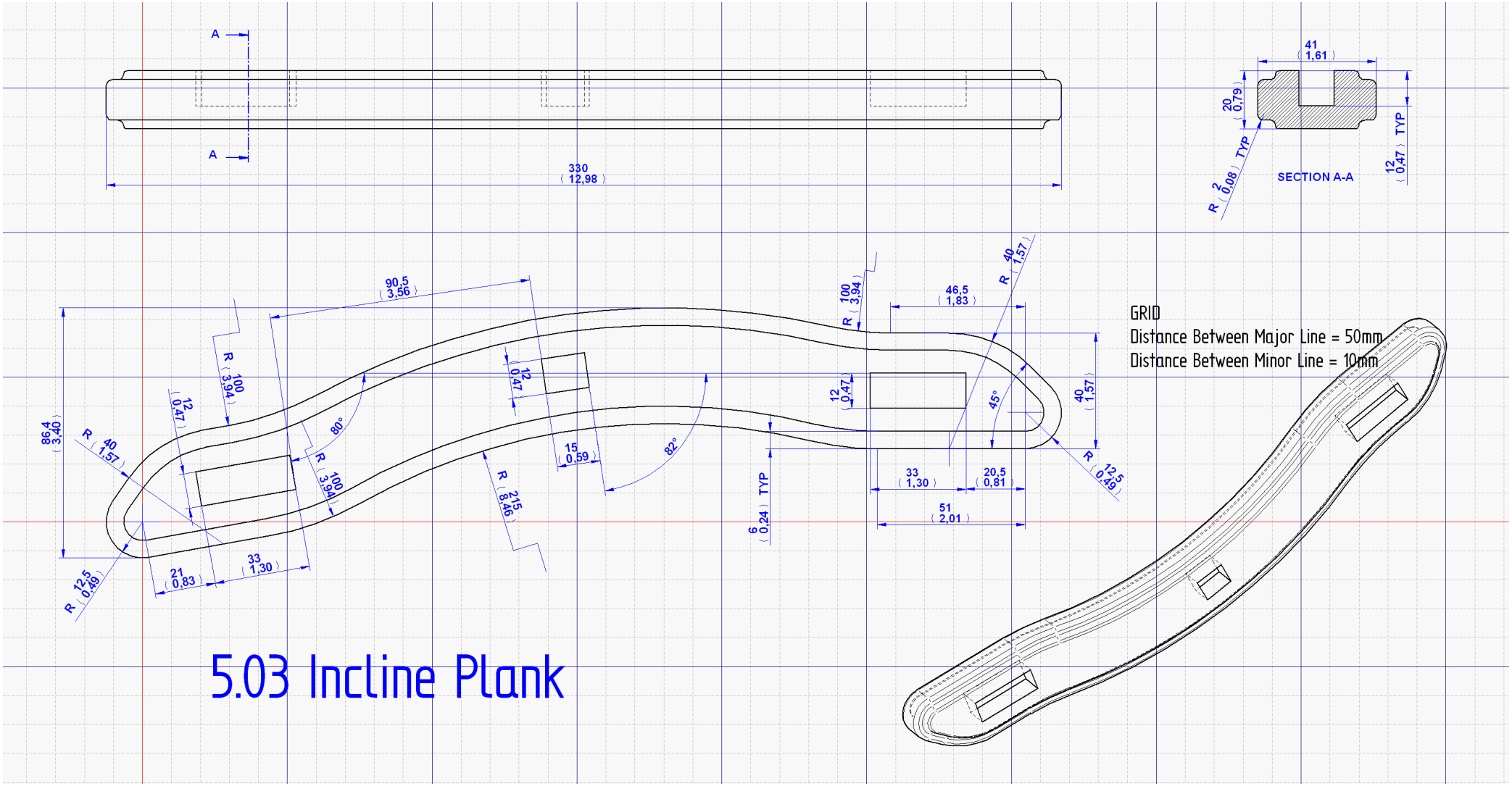


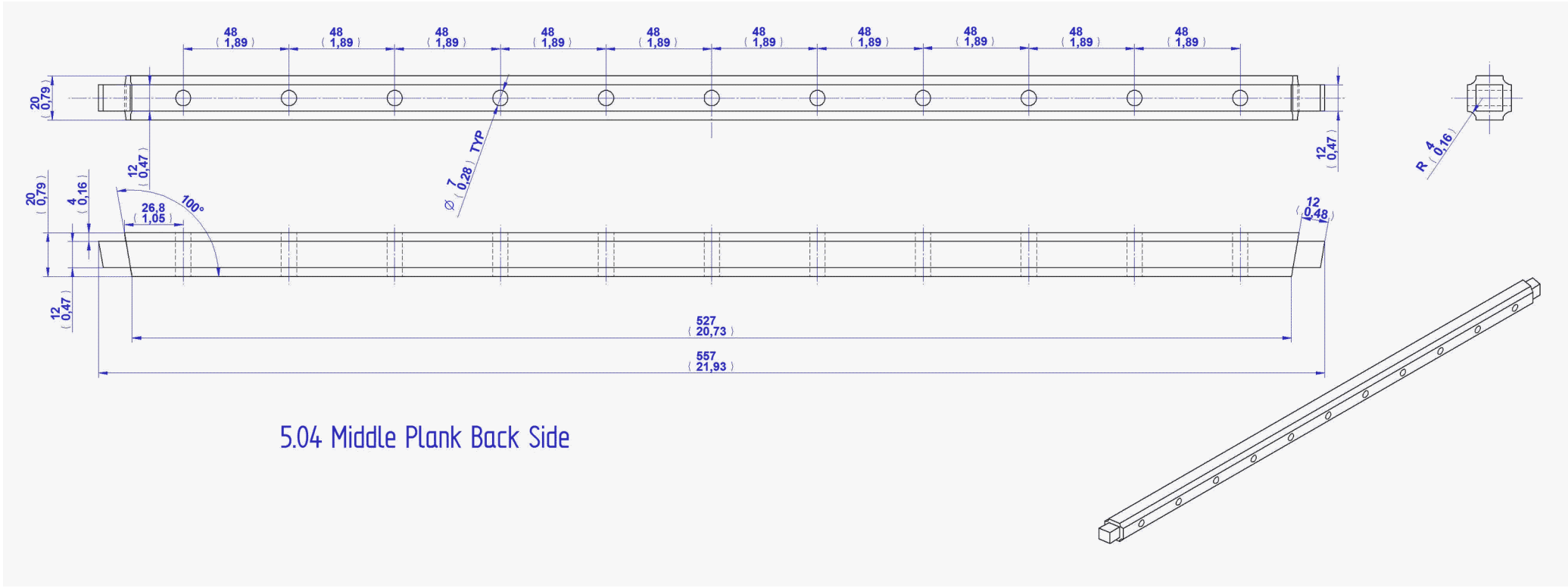


5.01 Short Plank Back Side
6.01 Short Plank Back Side

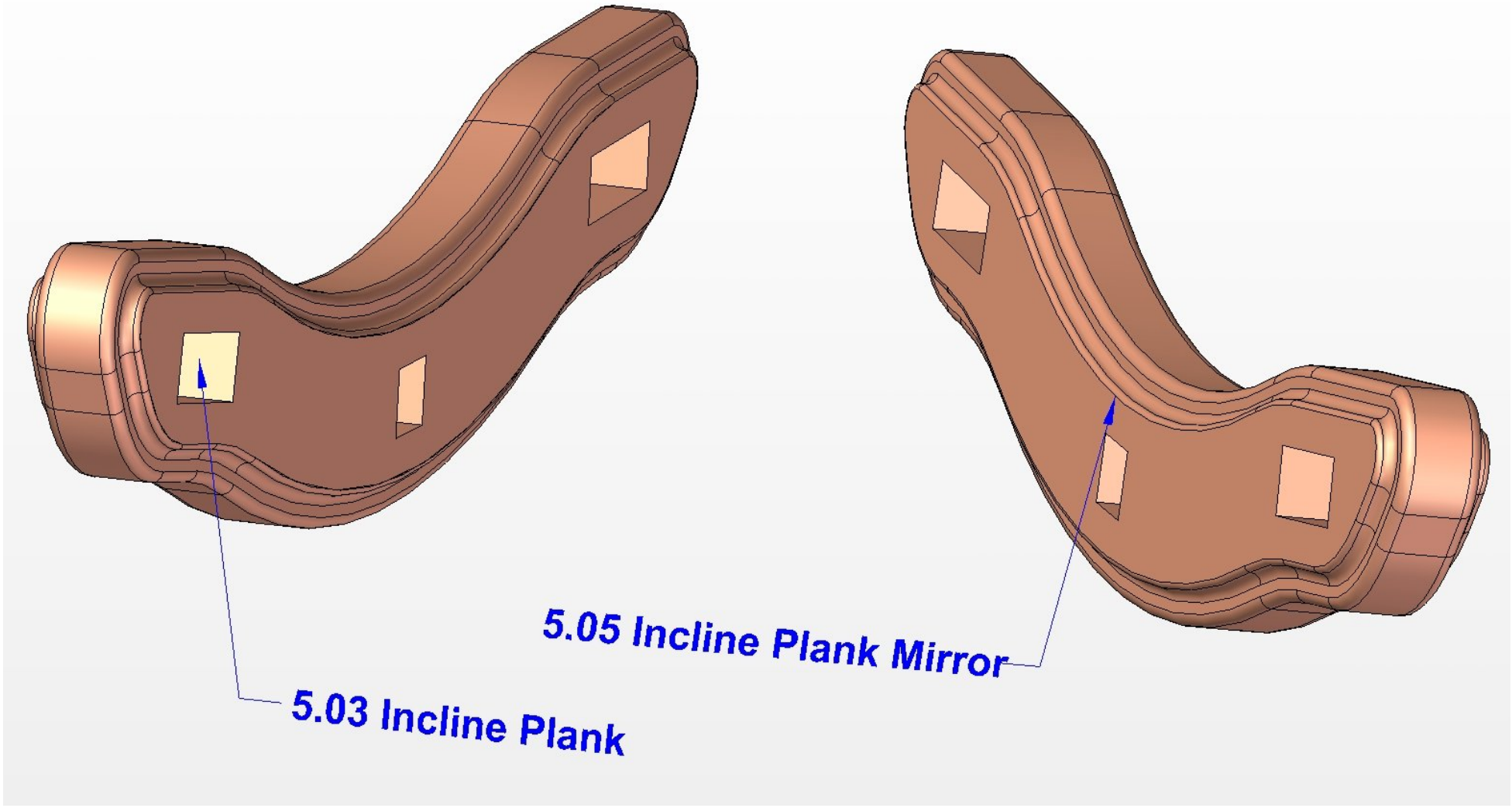


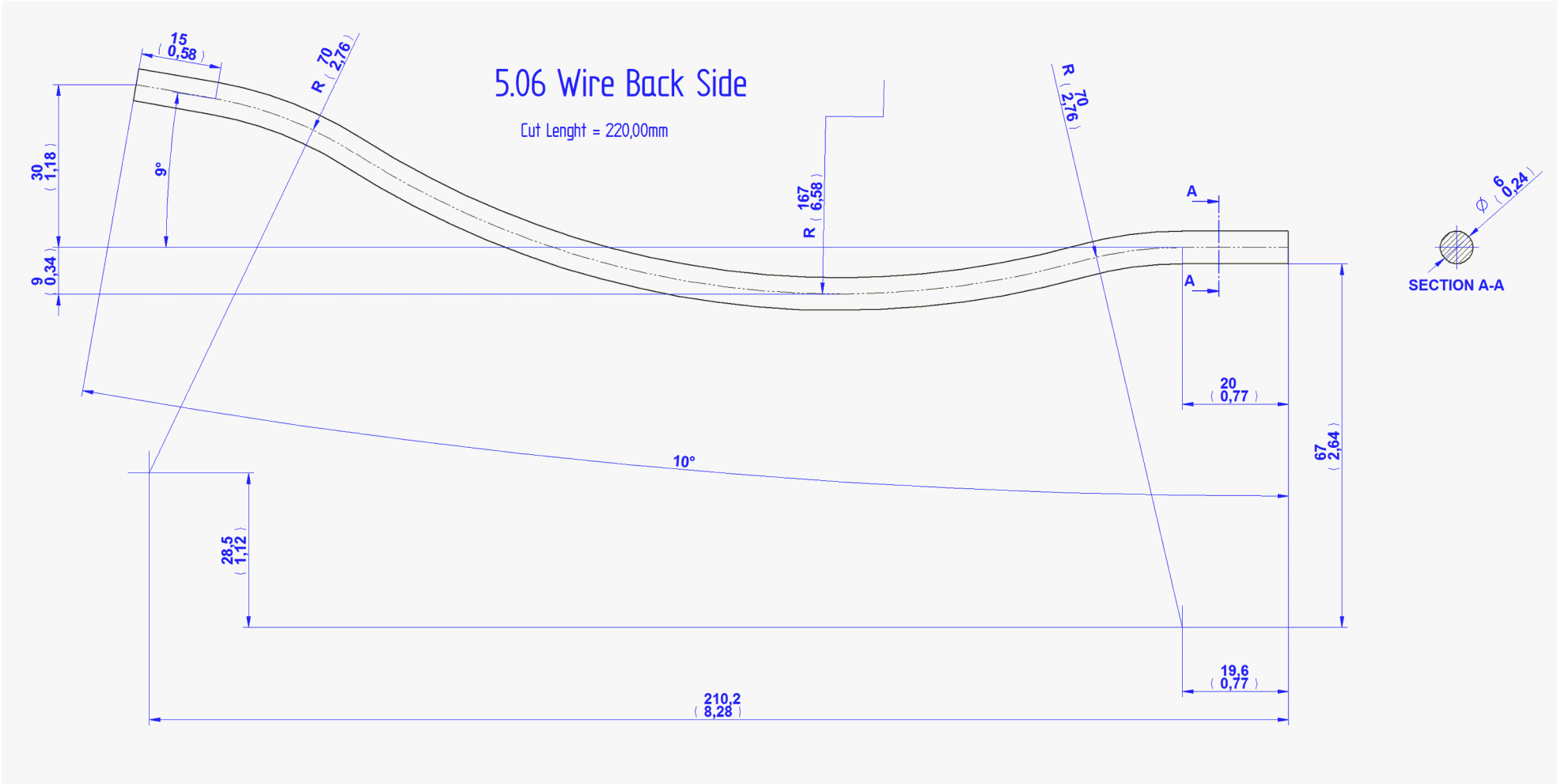
5.02 Longer Plank Back Side

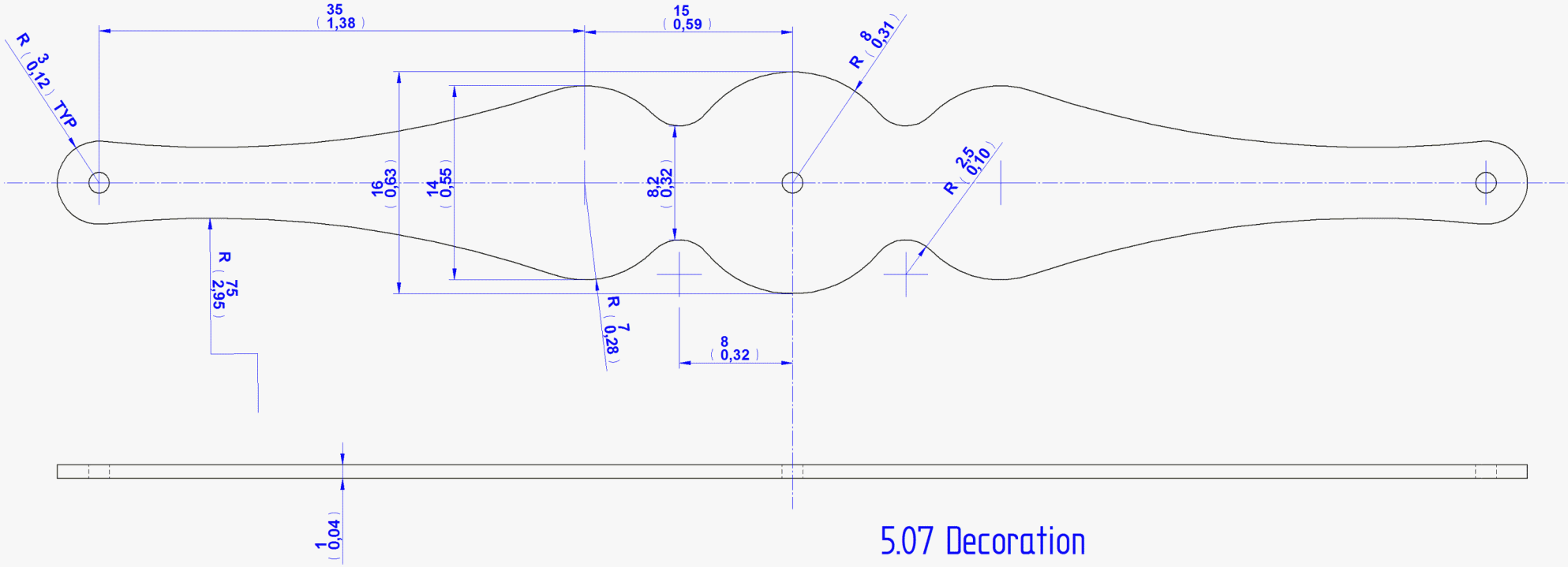

A
A
330
12,98
41
1,61
20
0,79
TYP
R 2
0,08
TYP
12
0,47
SECTION A-A
90,5
3,56
R 100
3,94
12
0,47
80°
R 40
1,57
86,4
3,40
R 12,5
0,49
21
0,83
33
1,30
R 100
3,94
15
0,59
82°
R 215
8,46
6
0,24
TYP
R 100
3,94
46,5
1,83
R 40
1,57
12
0,47
45°
40
1,57
R 12,5
0,49
33
1,30
20,5
0,81
51
2,01
GRID
Distance Between Major Line = 50mm
Distance Between Minor Line = 10mm
5.03 Incline Plank



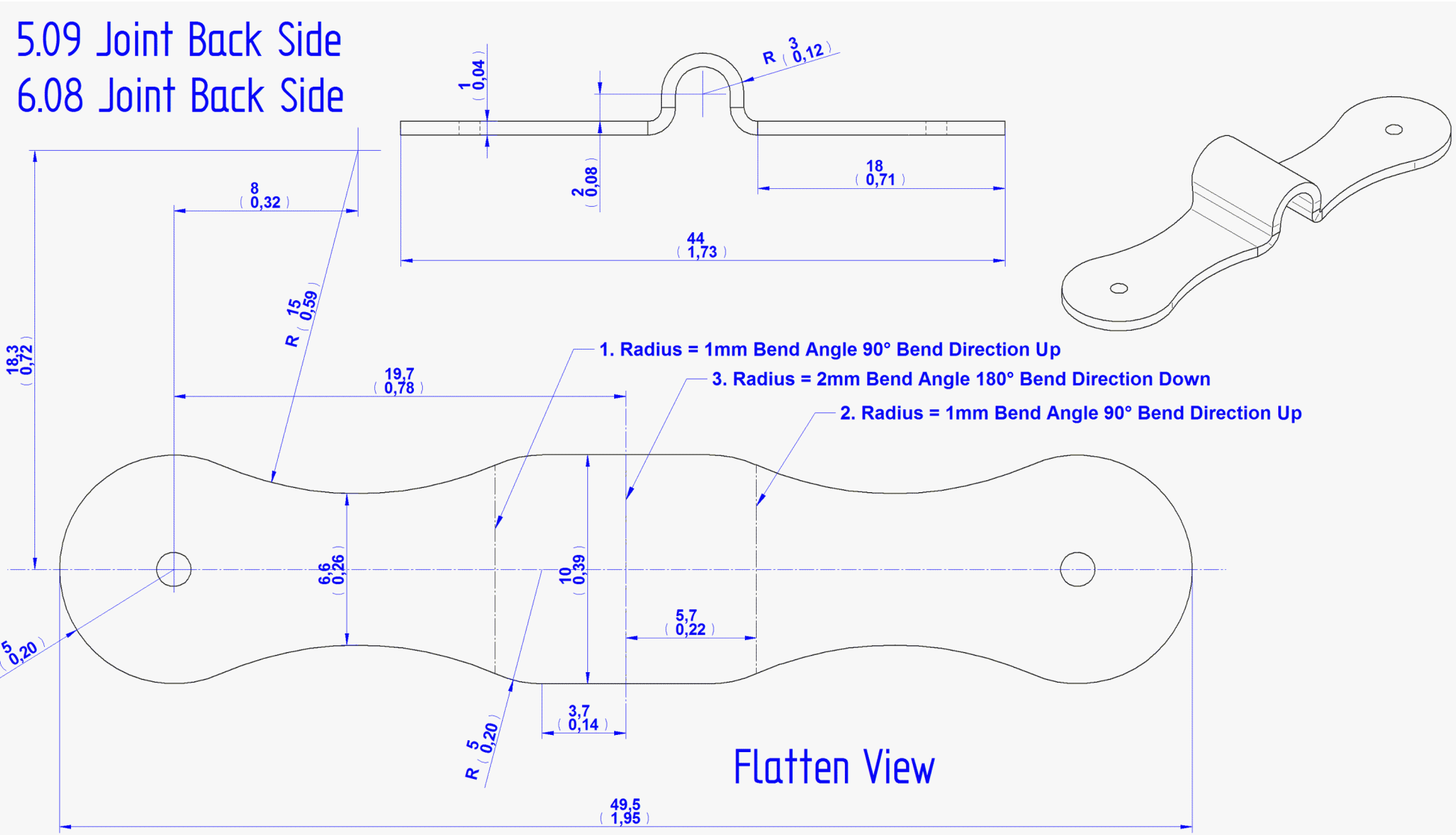
5.04 Middle Plank Back Side

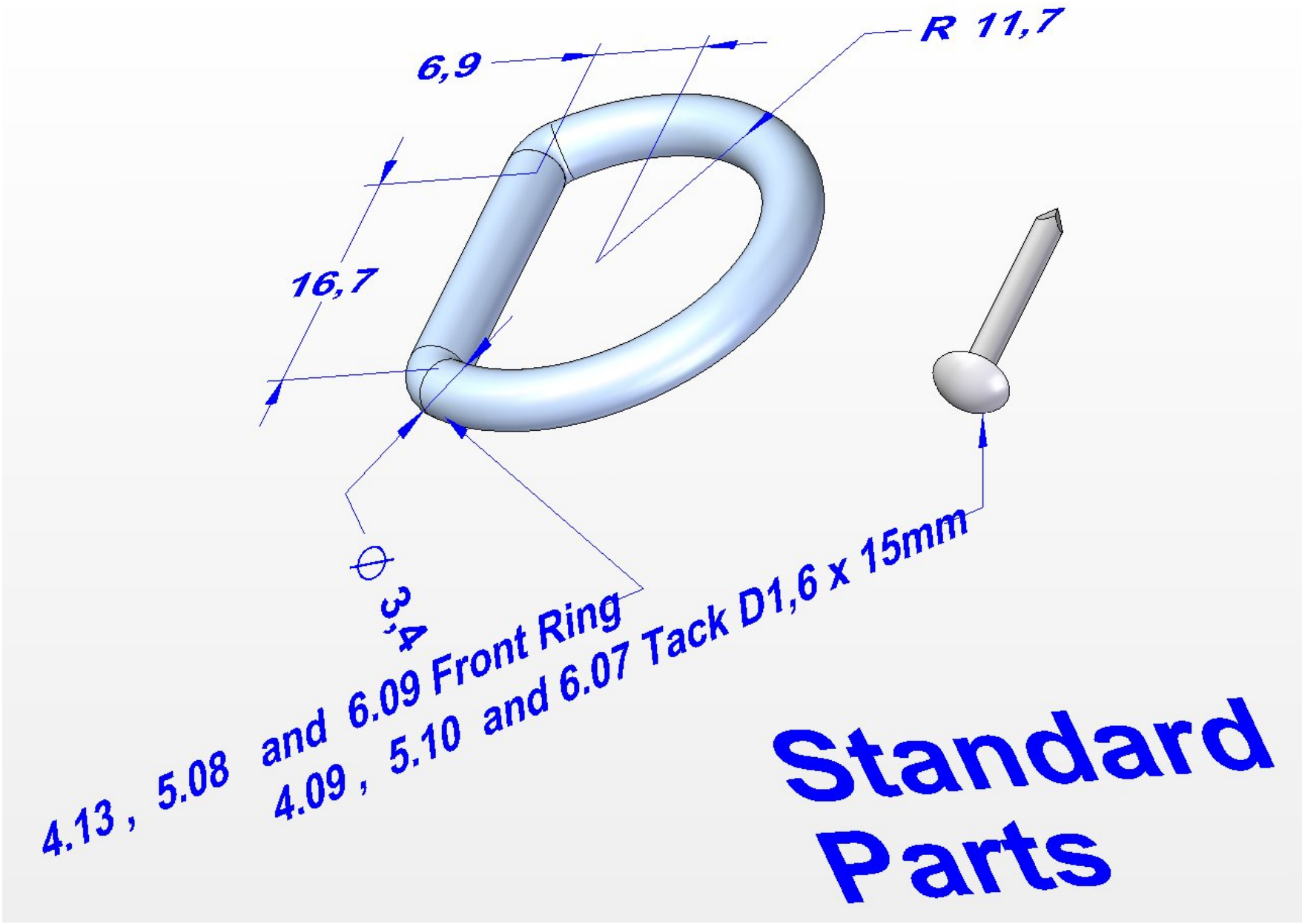

5.05 Incline Plank Mirror
5.03 Incline Plank


5.06 Wire Back Side
Cut Lenght = 220,00mm
15
0,58
R 70
2,76
R 70
2,76
30
1,18
9°
9
0,34
167
R 6,58
A
A
Φ 6
0,24
SECTION A-A
20
0,77
10°
67
2,64
28,5
1,12
19,6
0,77
210,2
8,28

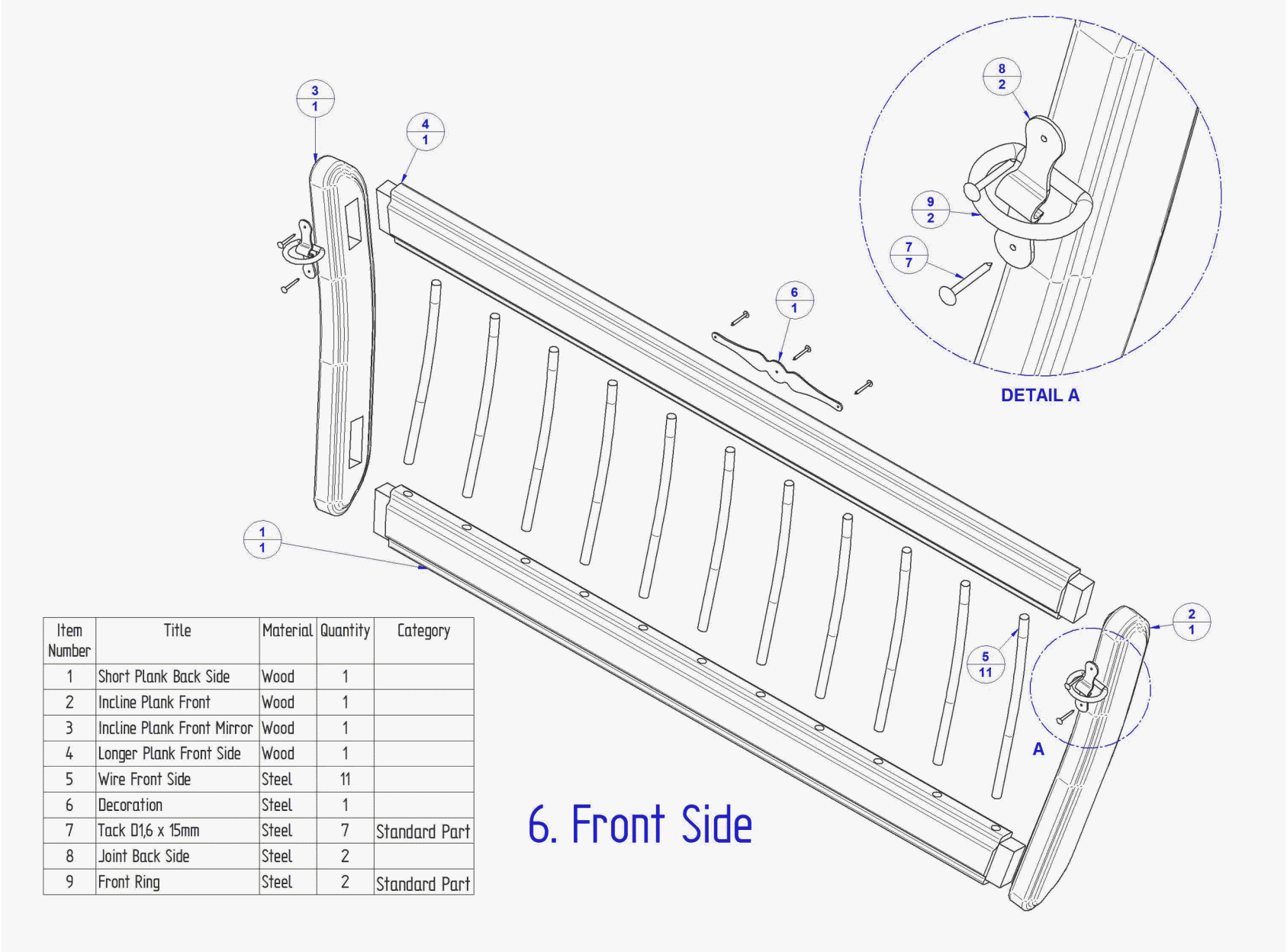

35
1,38
15
0,59
R 3
0,12
TYP
R 8
0,31
16
0,63
14
0,55
8,2
0,32
R 2,5
0,10
R 75
2,95
R 7
0,28
8
0,32
1
0,04
5.07 Decoration
6.06 Decoration

5.09 Joint Back Side
6.08 Joint Back Side



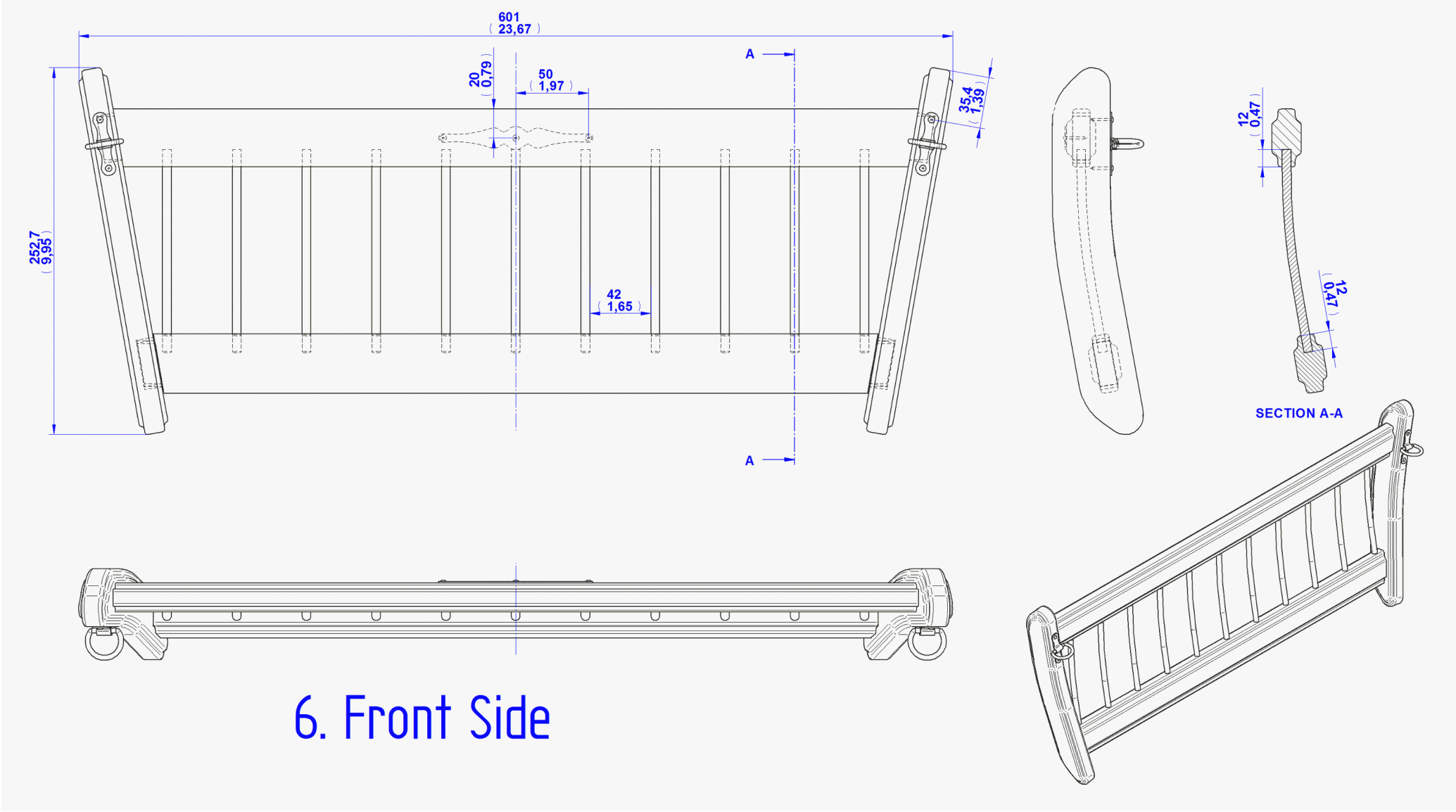

6,9
R 11,7
16,7
Ø3,4
4.13 , 5.08 and 6.09 Front Ring
4.09 , 5.10 and 6.07 Tack D1,6 x 15mm
Standard Parts

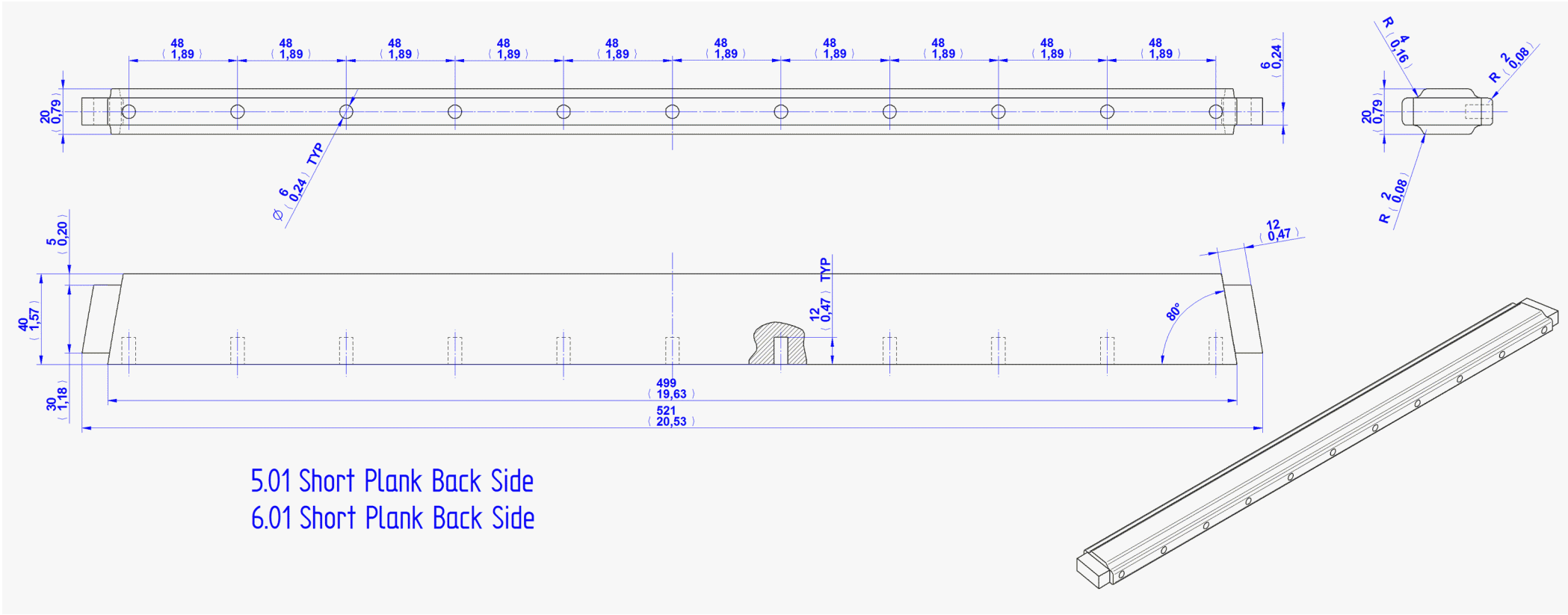
6. Front Side Subassembly - Parts List



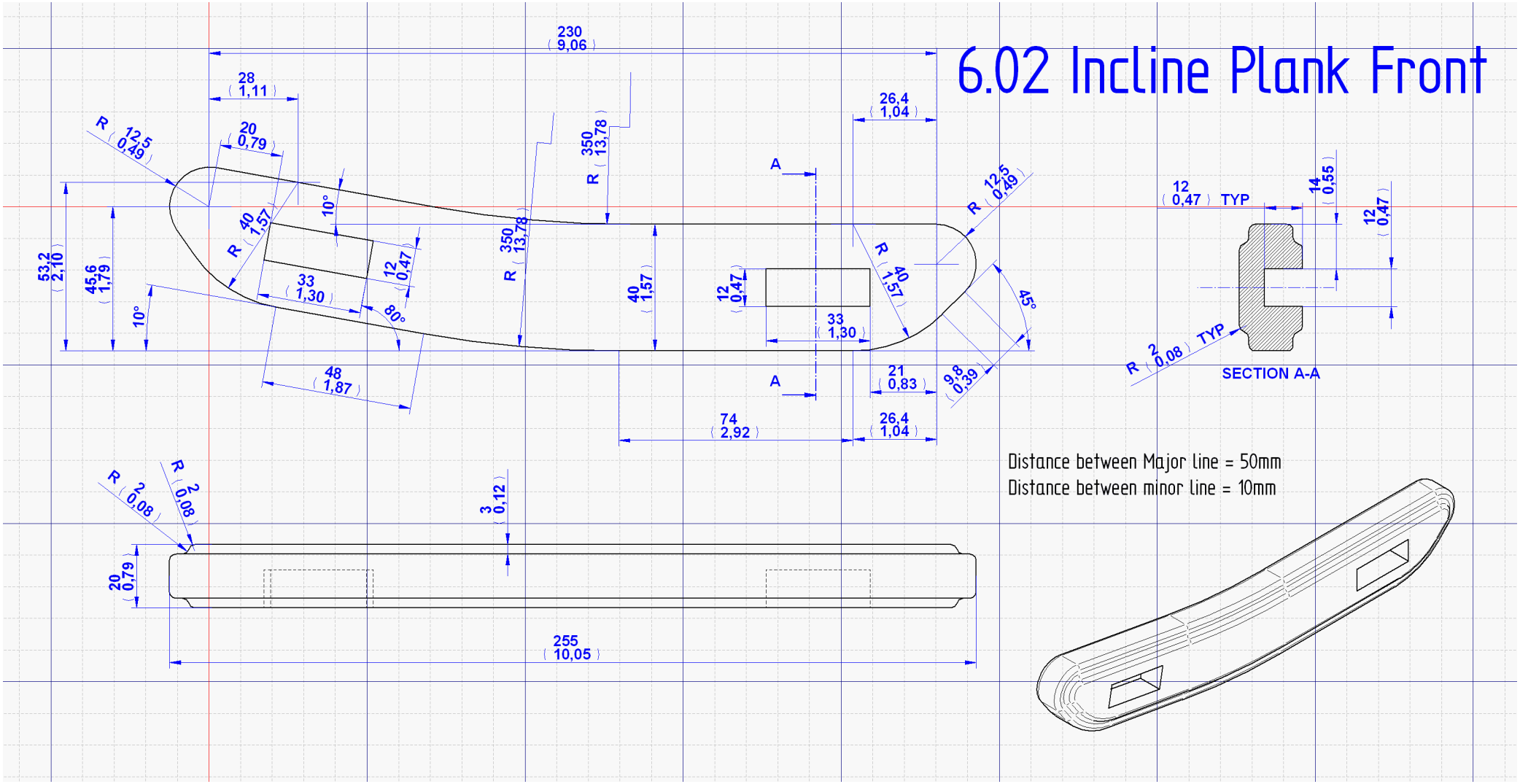
Item Number	Title	Material	Quantity	Category
1	Short Plank Back Side	Wood	1	
2	Incline Plank Front	Wood	1	
3	Incline Plank Front Mirror	Wood	1	
4	Longer Plank Front Side	Wood	1	
5	Wire Front Side	Steel	11	
6	Decoration	Steel	1	
7	Tack D1,6 x 15mm	Steel	7	Standard Part
8	Joint Back Side	Steel	2	
9	Front Ring	Steel	2	Standard Part

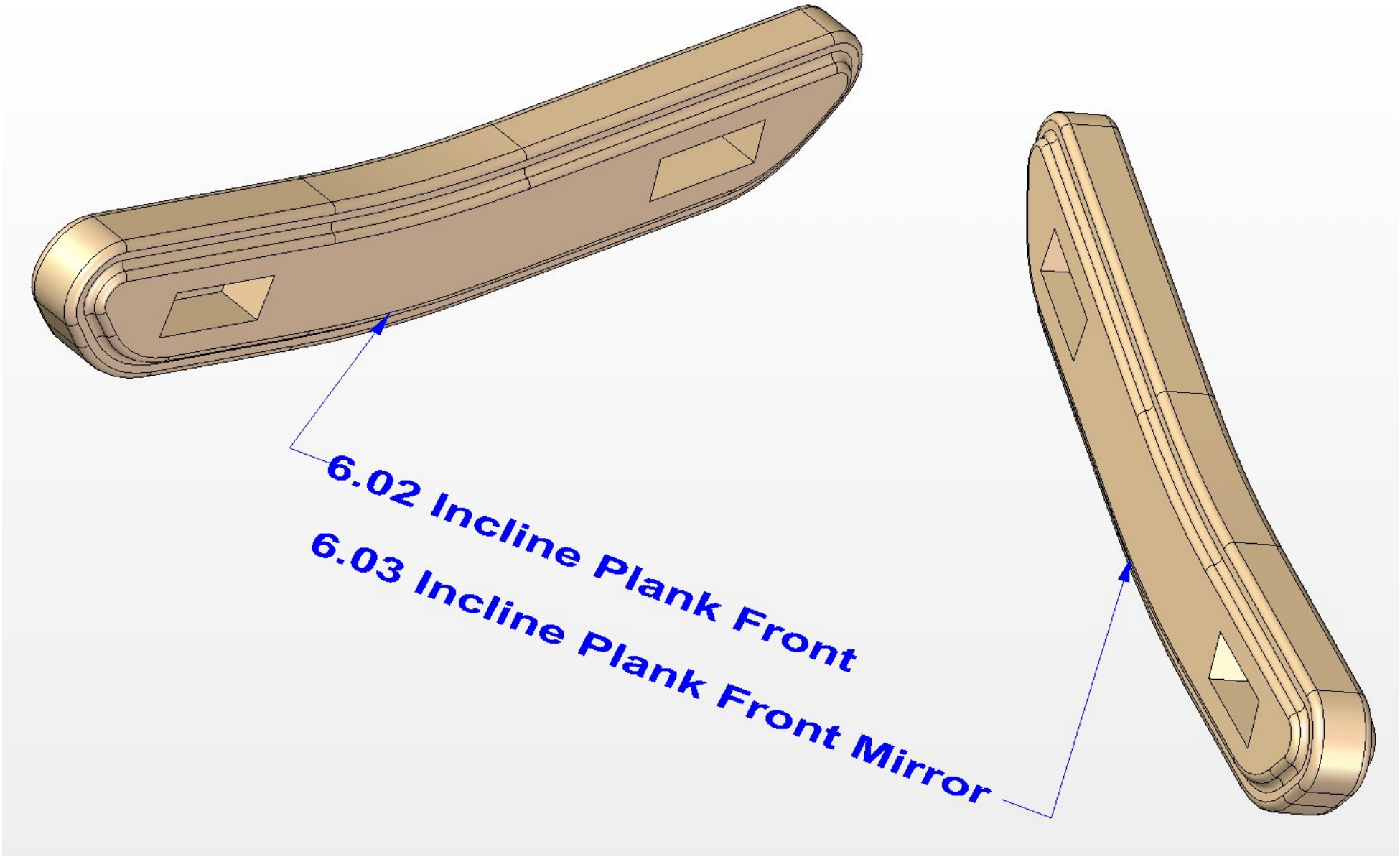
Front Side Subassembly Drawing

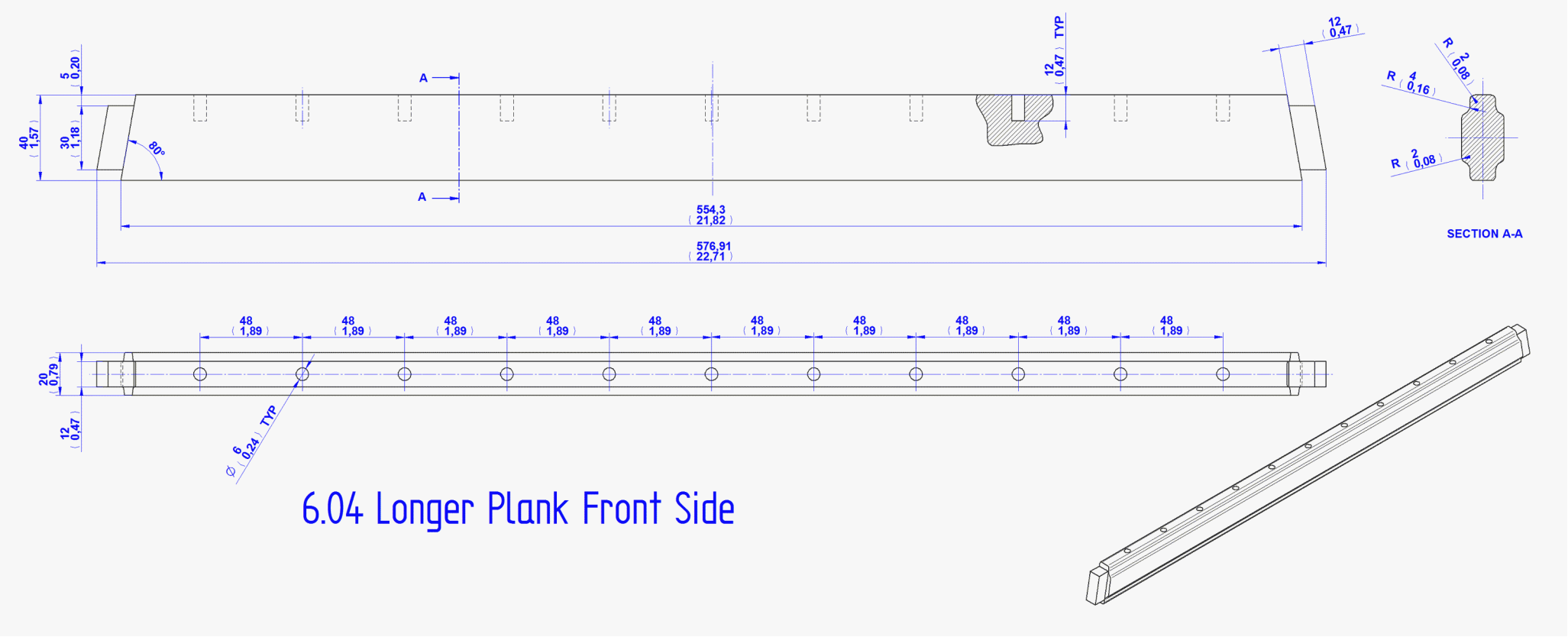


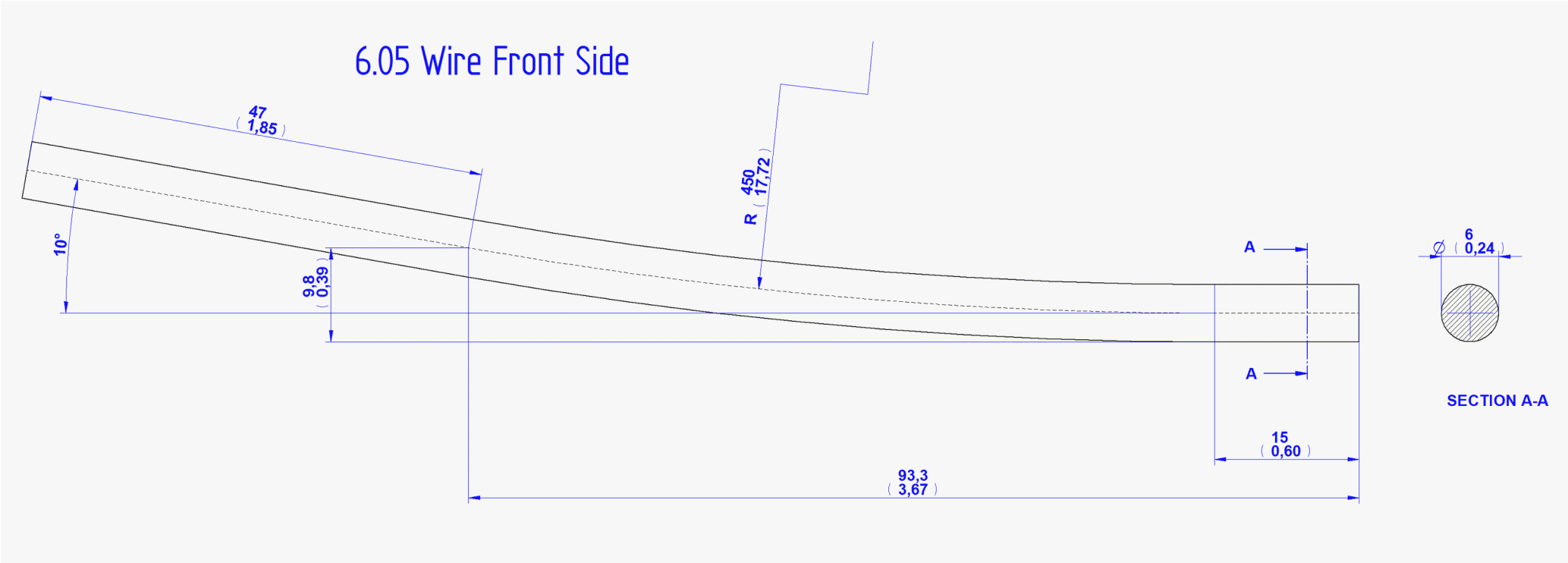


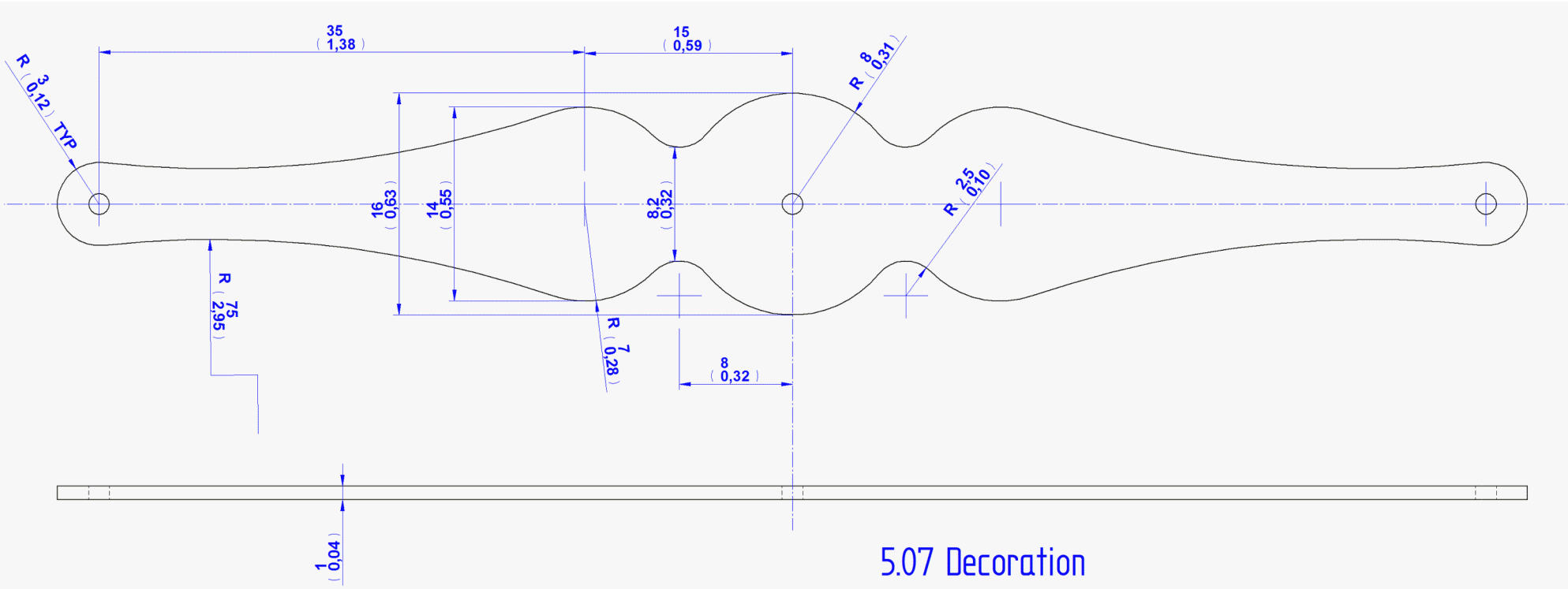
5.01 Short Plank Back Side
6.01 Short Plank Back Side


6.02 Incline Plank Front
230
9,06
28
1,11
20
0,79
R 12,5
0,49
26,4
1,04
350
13,78
A
10°
40
1,57
53,2
2,10
45,6
1,79
33
1,30
12
0,47
80°
48
1,87
74
2,92
21
0,83
9,8
0,39
45°
12
0,47 TYP
14
0,55
R 2
0,08 TYP
SECTION A-A
Distance between Major line = 50mm
Distance between minor line = 10mm
3
0,12
255
10,05

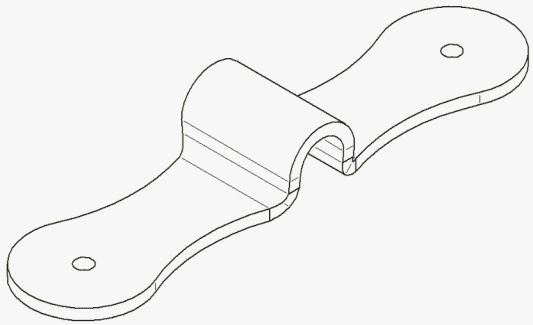

6.02 Incline Plank Front
6.03 Incline Plank Front Mirror


5 0,20
40 1,57
30 1,18
80°
A
A
12 0,47 TYP
12 0,47
554,3 21,82
576,91 22,71
R 2 0,08
R 4 0,16
R 2 0,08
SECTION A-A
48 1,89
20 0,79
12 0,47
Ø 6 0,24 TYP
6.04 Longer Plank Front Side


6.05 Wire Front Side
47
(1,85)
R 450
(17,72)
10°
9,8
(0,39)
A
A
6
∅ (0,24)
SECTION A-A
15
(0,60)
93,3
(3,67)

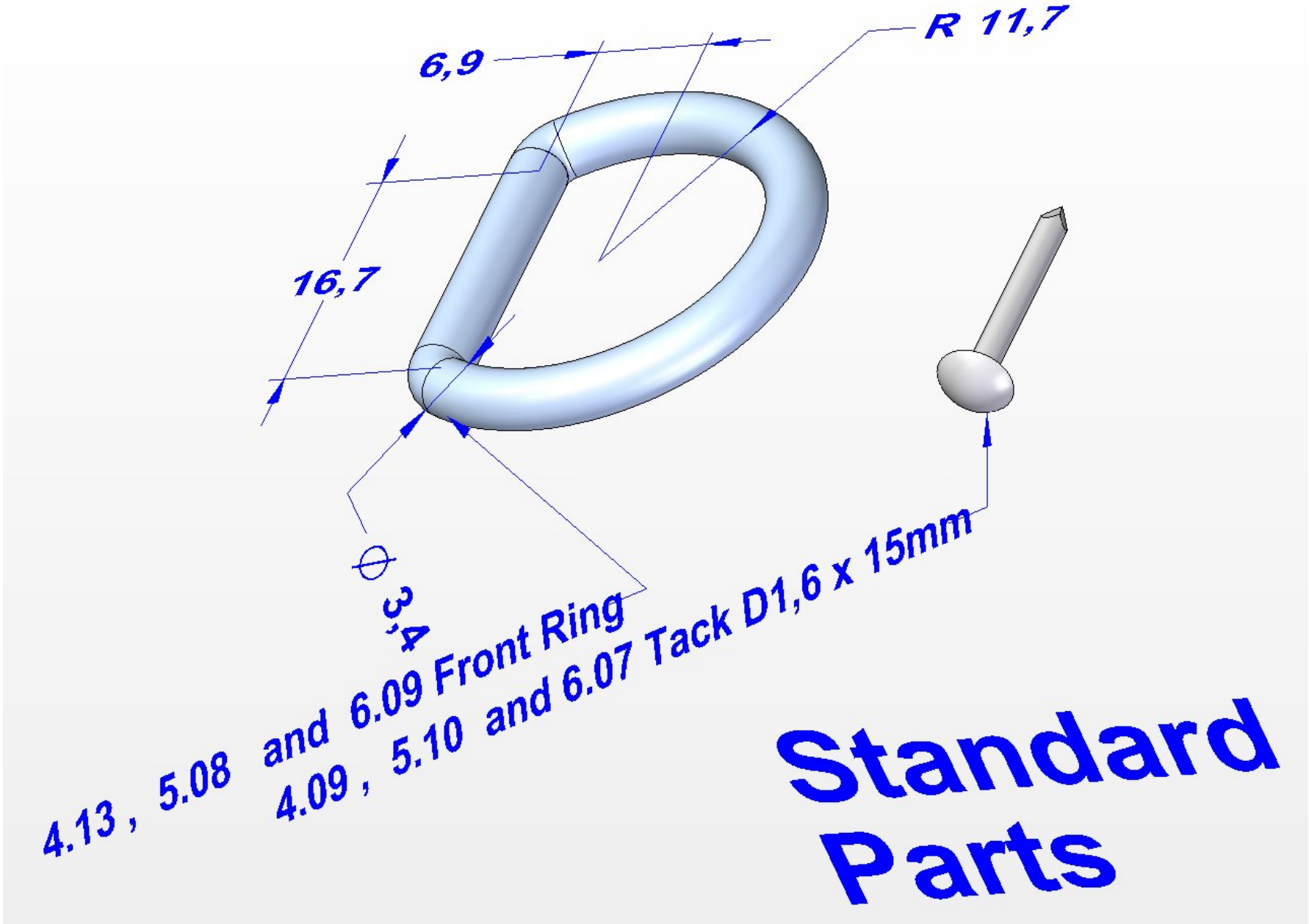

35
(1,38)
15
(0,59)
R 3
(0,12) TYP
R 8
(0,31)
16
(0,63)
14
(0,55)
8,2
(0,32)
R 2,5
(0,10)
R 75
(2,95)
R 7
(0,28)
8
(0,32)
1
(0,04)
5.07 Decoration
6.06 Decoration

5.09 Joint Back Side
6.08 Joint Back Side

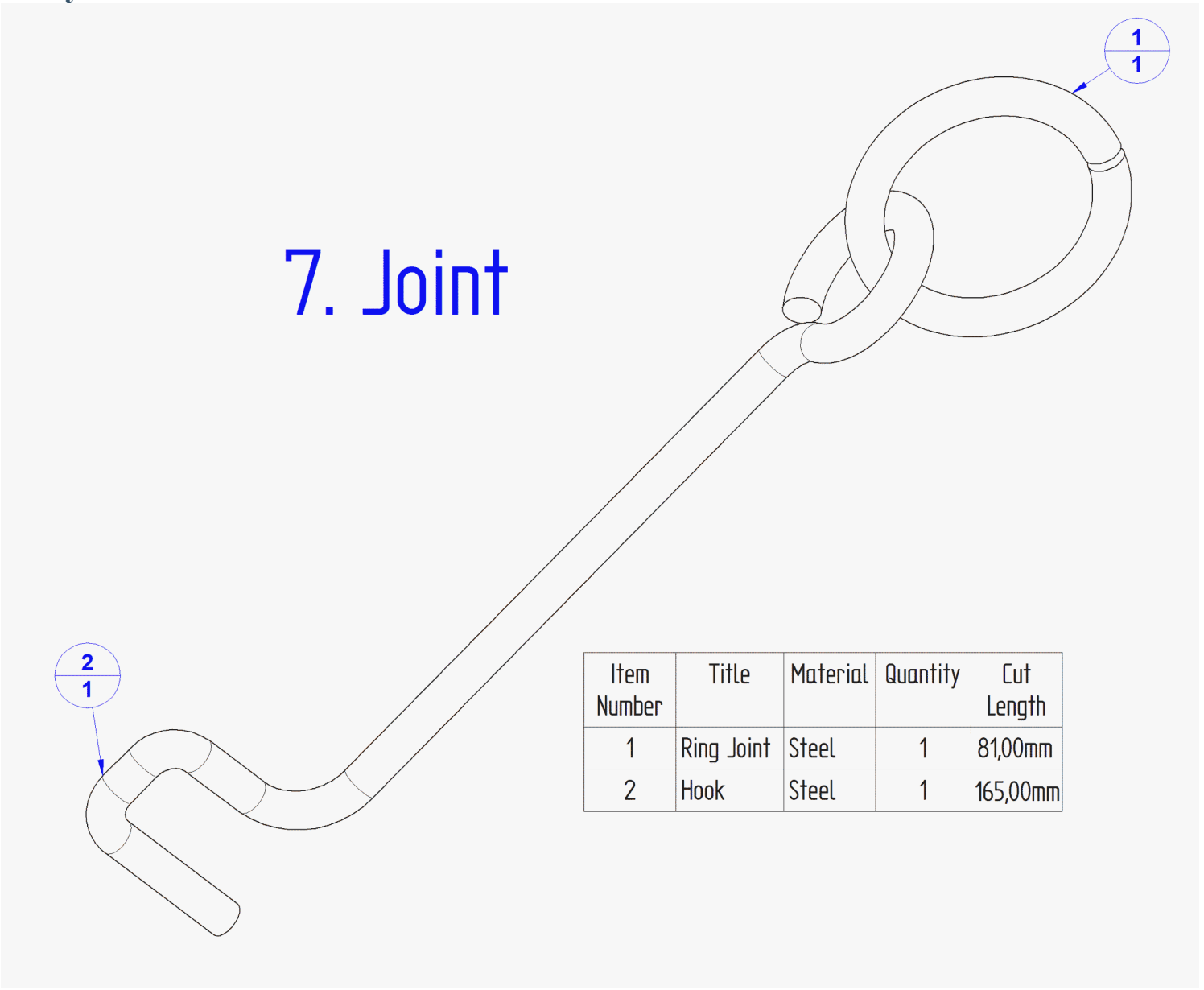


1. Radius = 1mm Bend Angle 90° Bend Direction Up
3. Radius = 2mm Bend Angle 180° Bend Direction Down
2. Radius = 1mm Bend Angle 90° Bend Direction Up

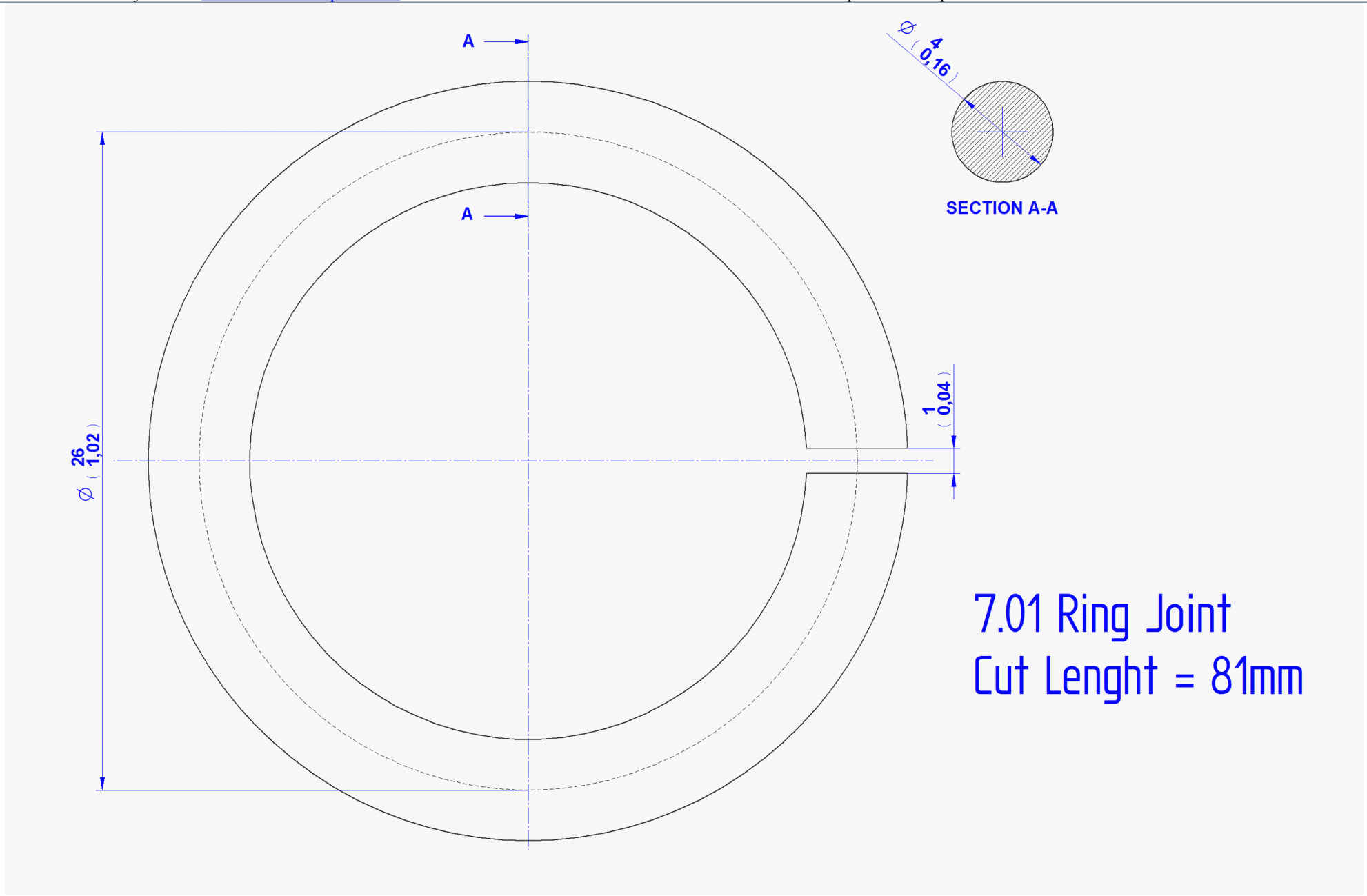
Flatten View

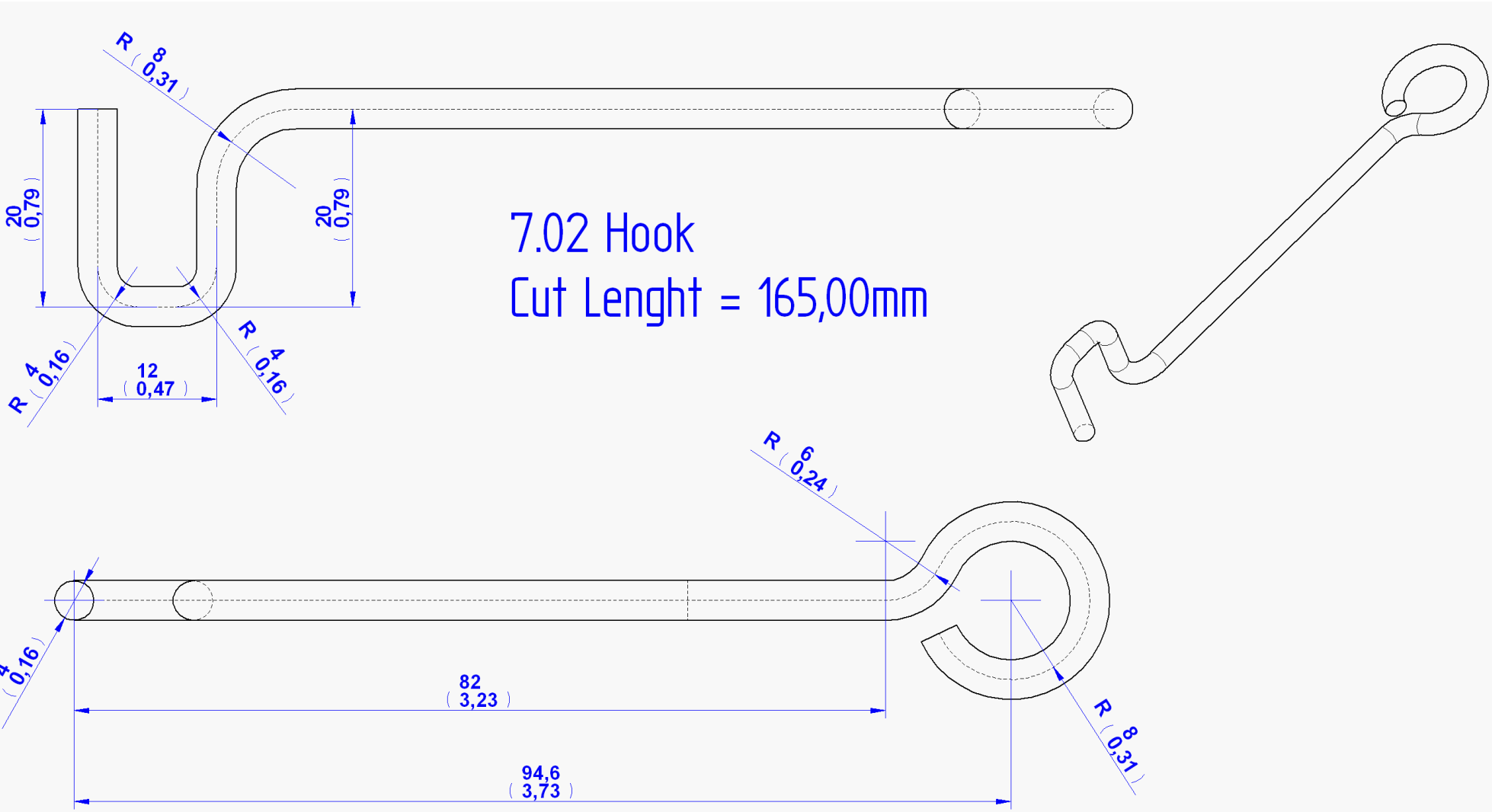

R 11,7
6,9
16,7
Ø3,4
4.13 , 5.08 and 6.09 Front Ring
4.09 , 5.10 and 6.07 Tack D1,6 x 15mm
Standard Parts

7. Joint Subassembly - Parts List

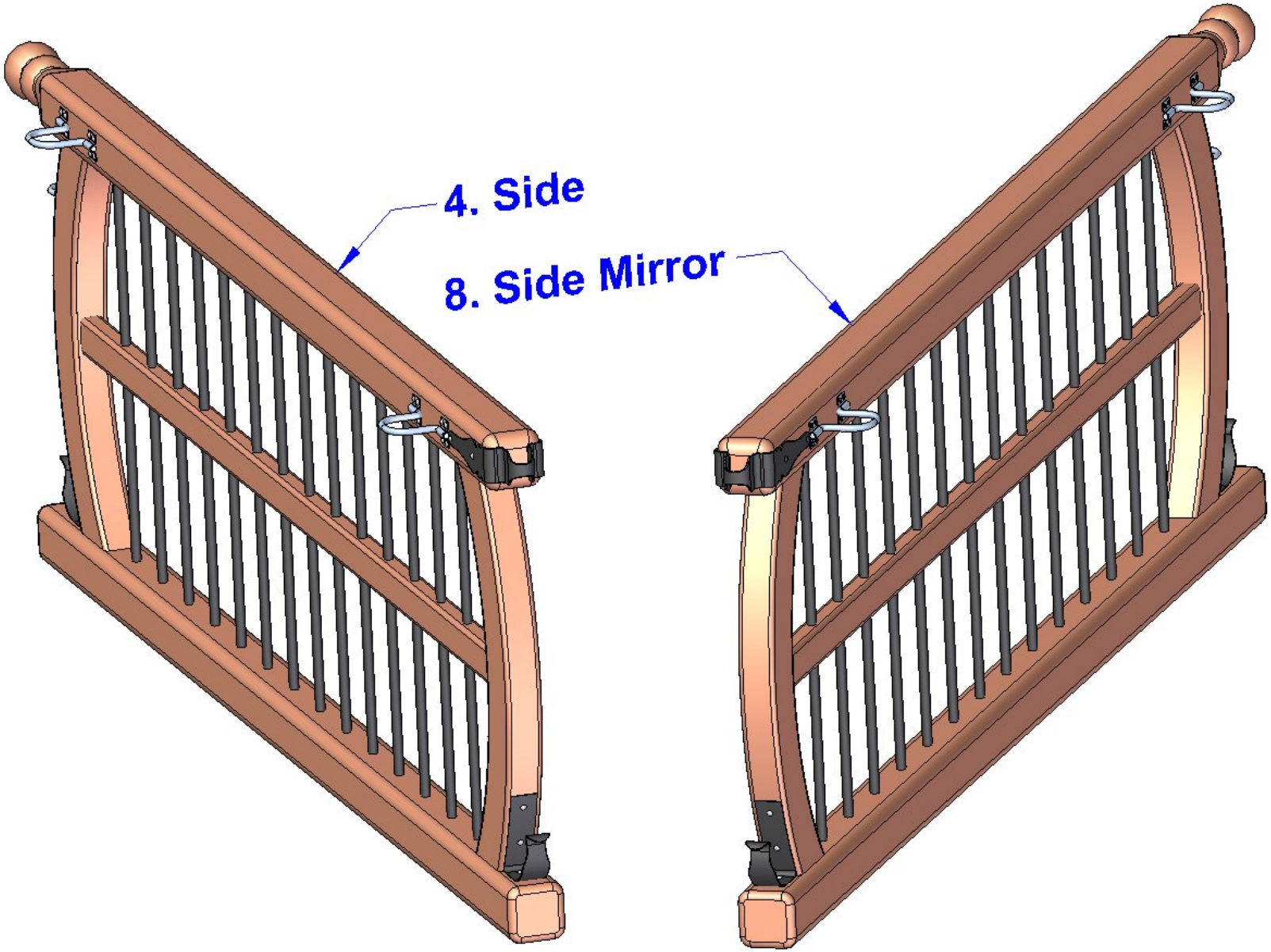


Item Number	Title	Material	Quantity	Cut Length
1	Ring Joint	Steel	1	81,00mm
2	Hook	Steel	1	165,00mm


A
A
Ø 4 (0,16)
SECTION A-A
Ø 26 (1,02)
1 (0,04)
7.01 Ring Joint
Cut Lenght = 81mm


R 8 (0,31)
20 (0,79)
20 (0,79)
R 4 (0,16)
12 (0,47)
R 4 (0,16)
7.02 Hook
Cut Lenght = 165,00mm
R 6 (0,24)
Ø 4 (0,16)
82 (3,23)
R 8 (0,31)
94,6 (3,73)

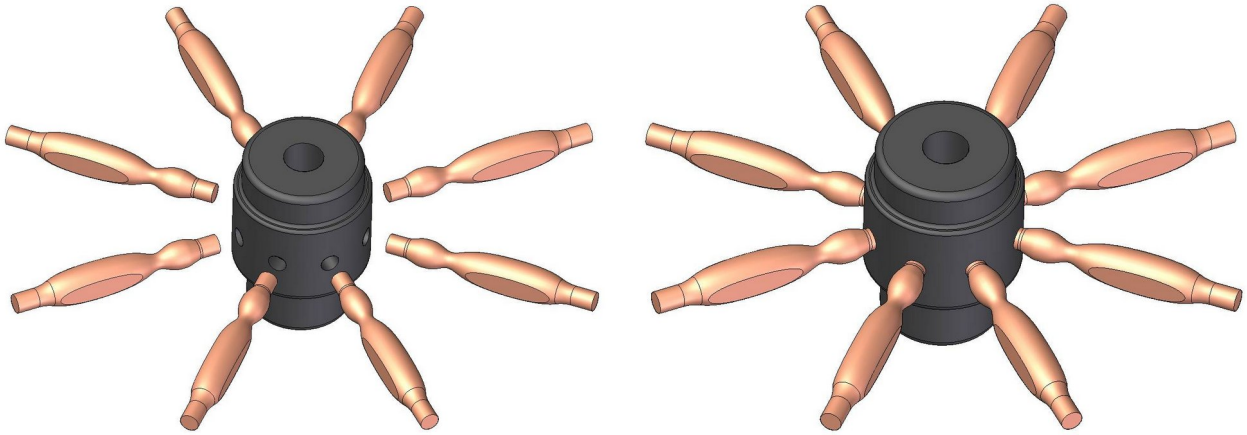
8. Side Mirror Subassembly



Assemblage images

1. WHEEL

1.



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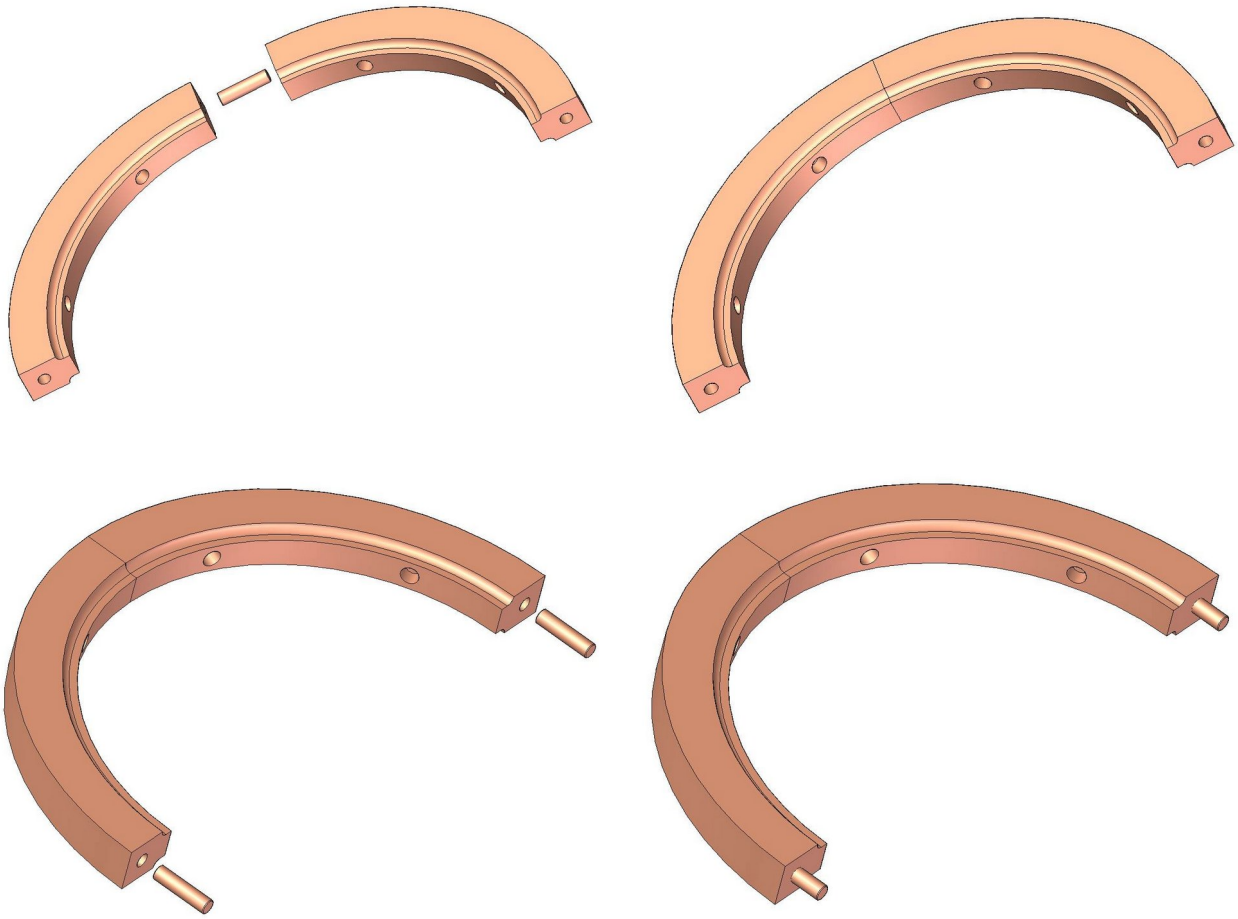

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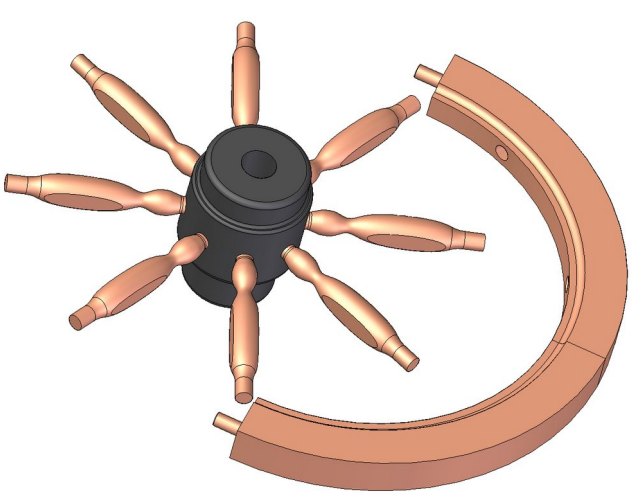

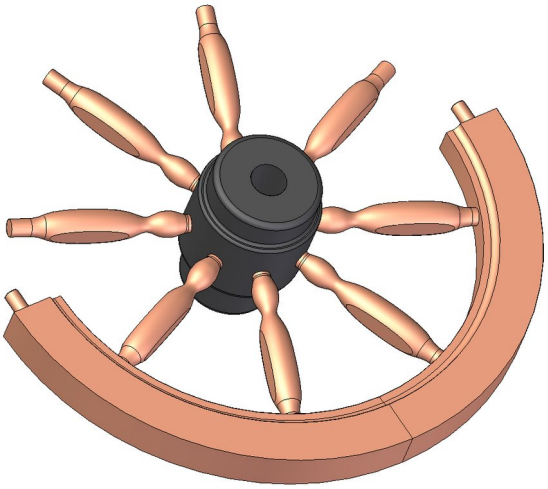

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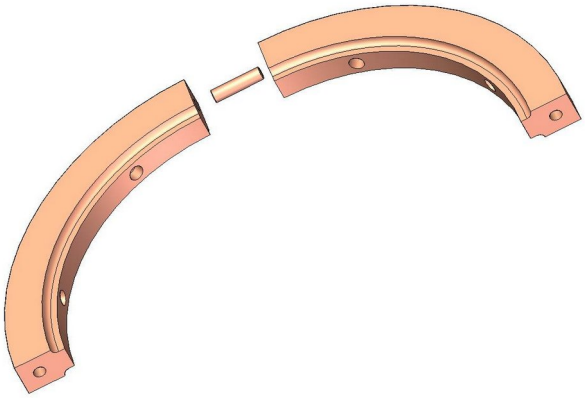

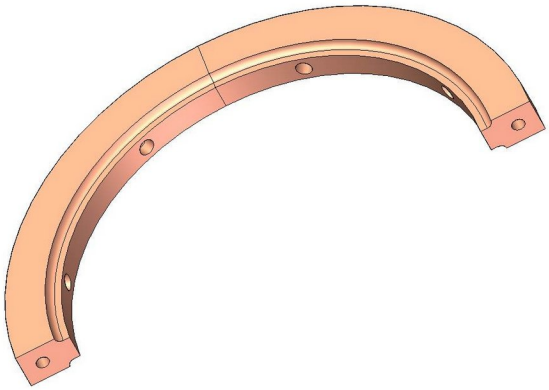

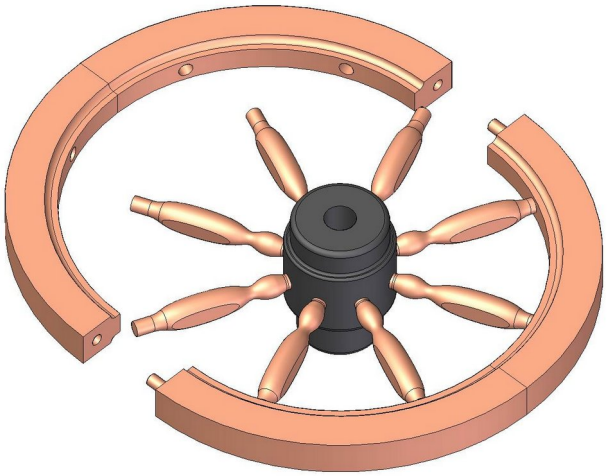

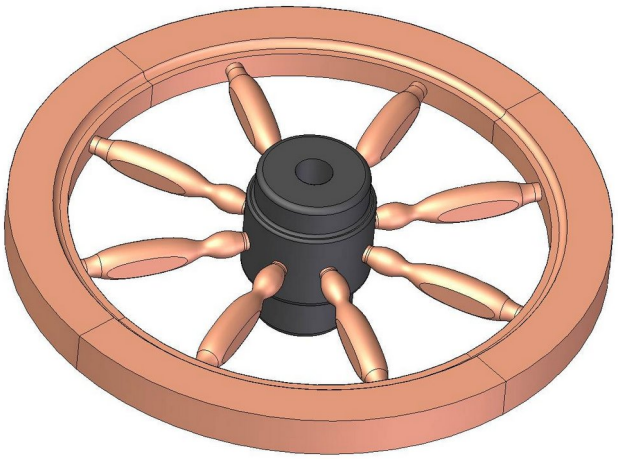

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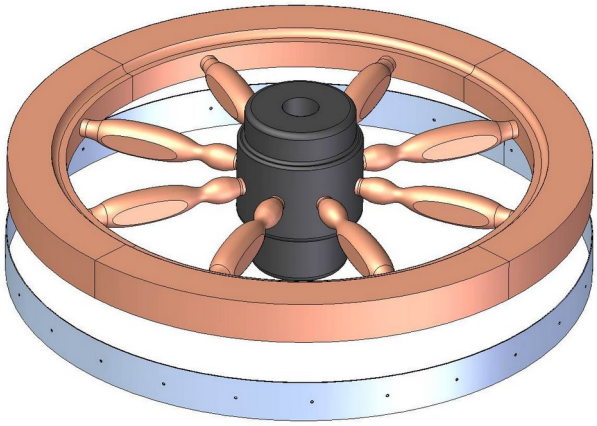

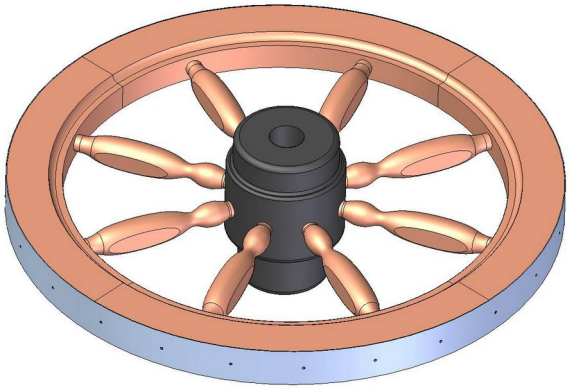

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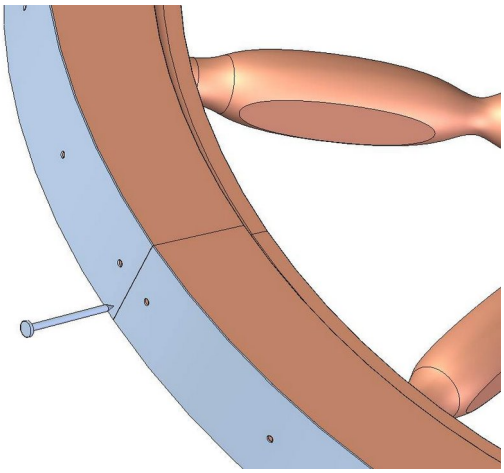

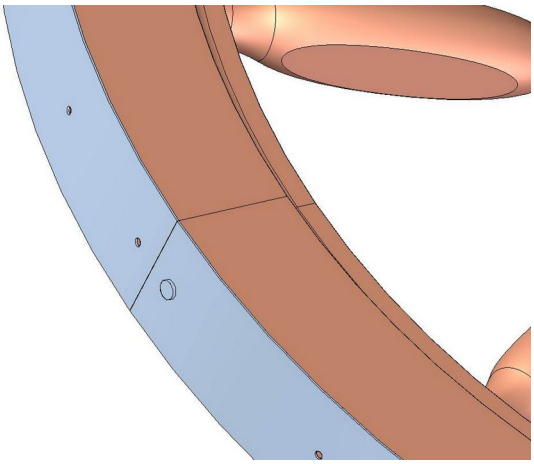

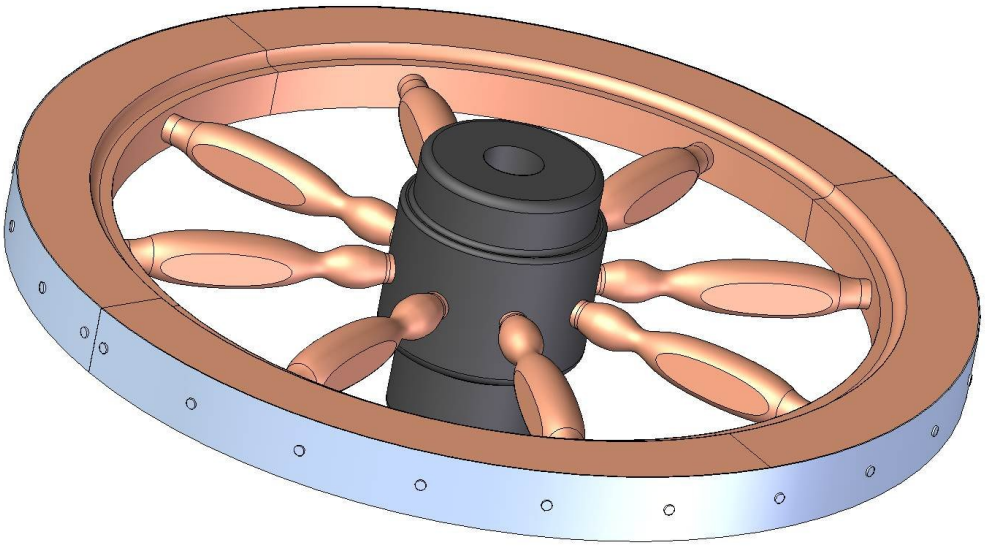

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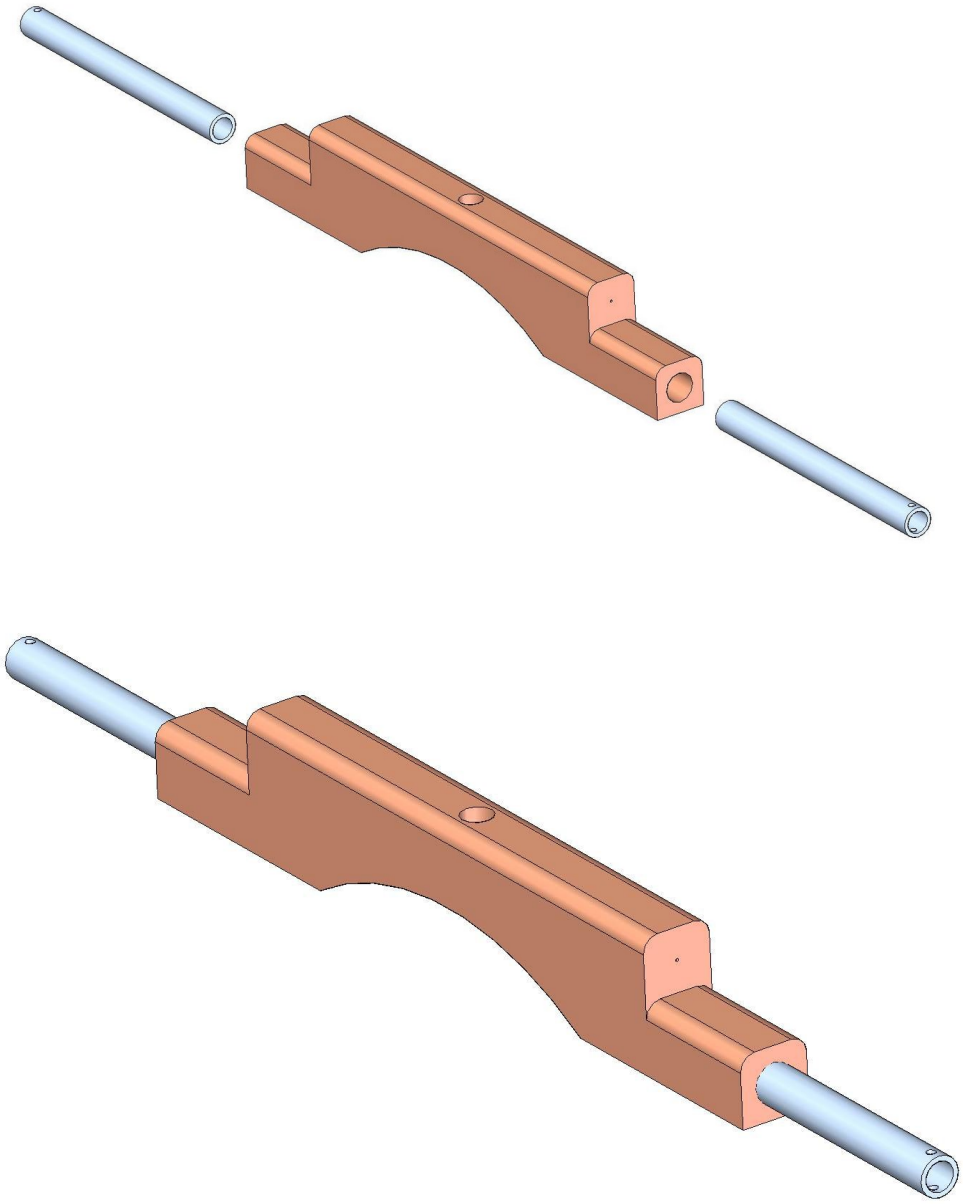

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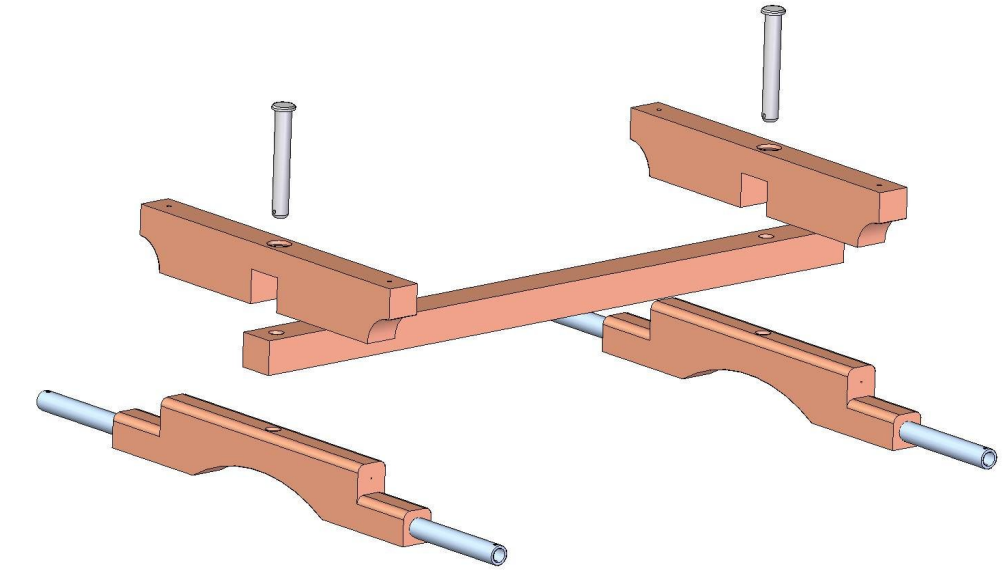

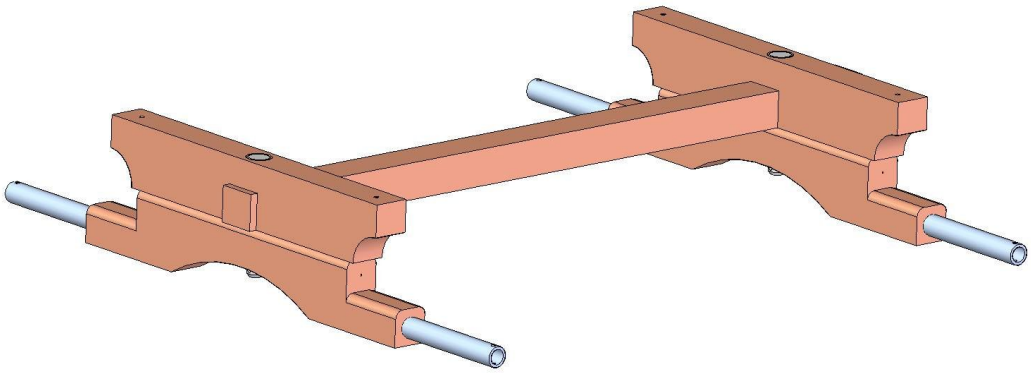

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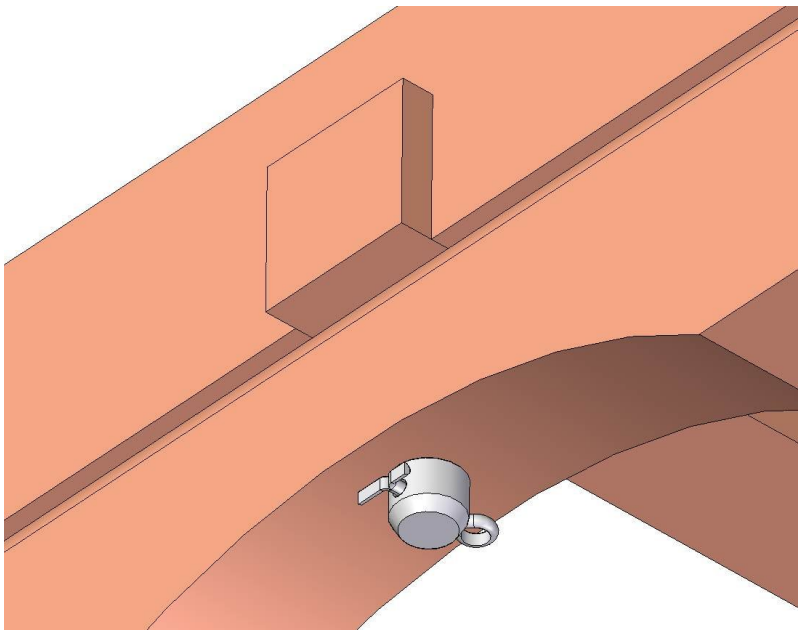

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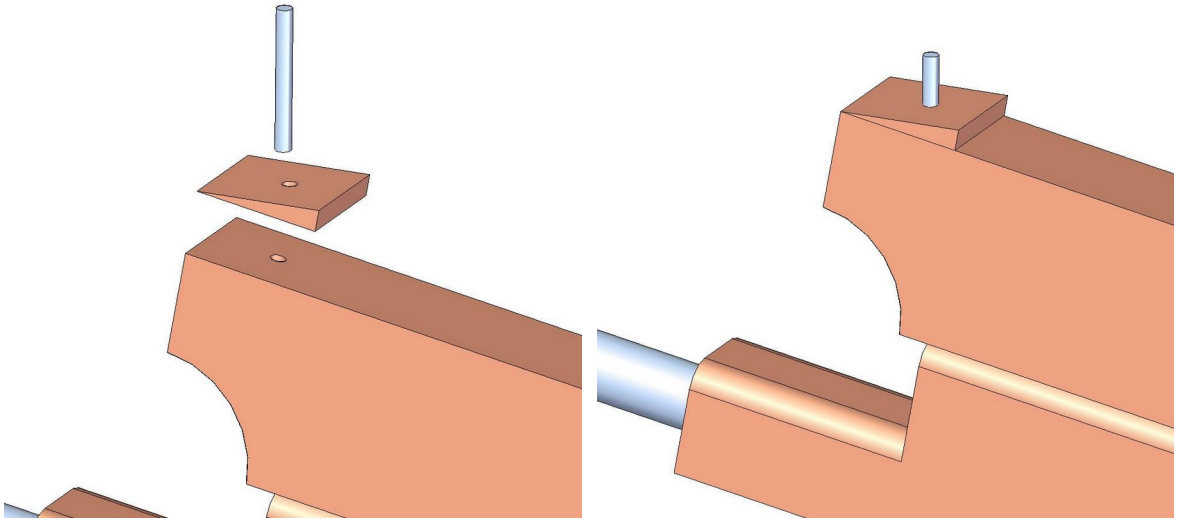

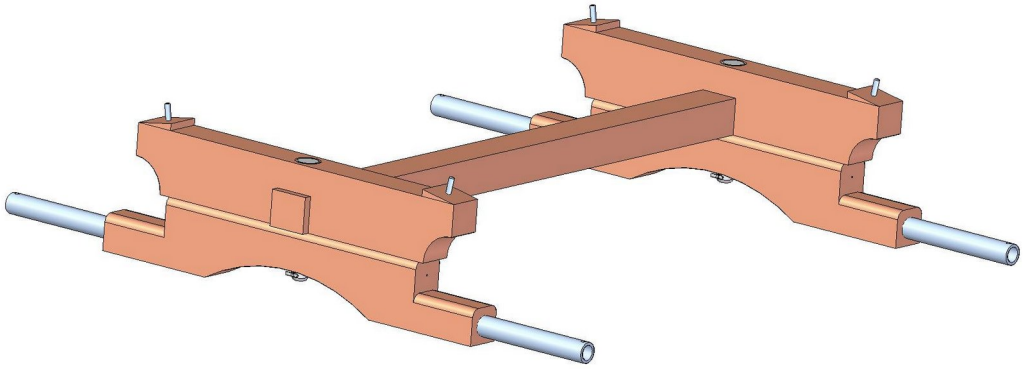

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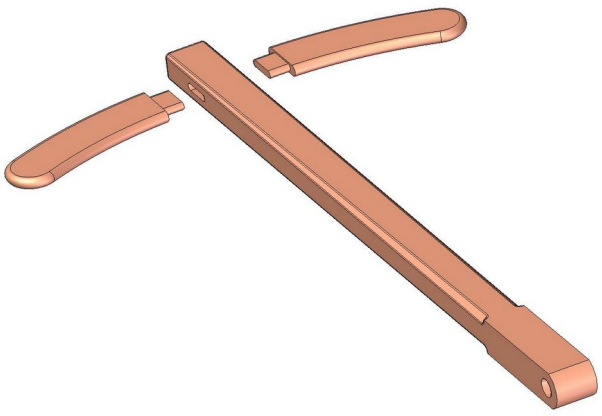

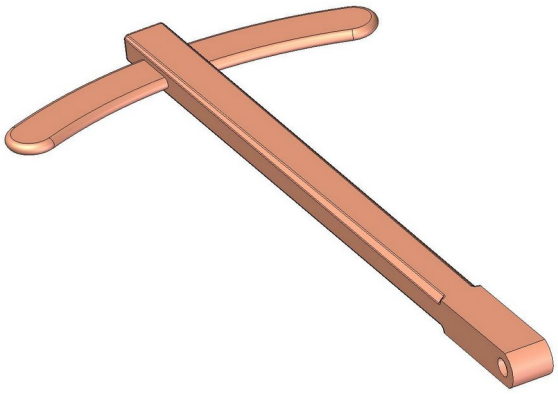

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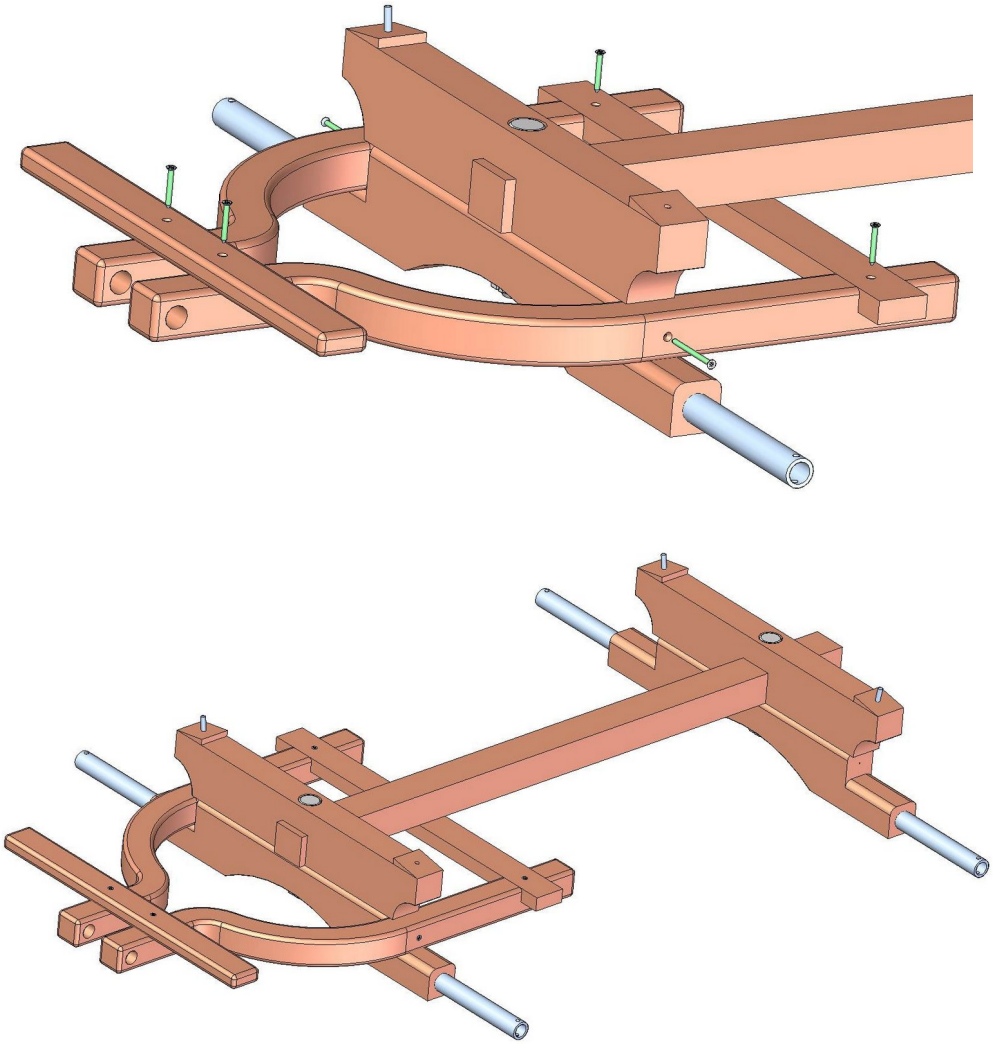

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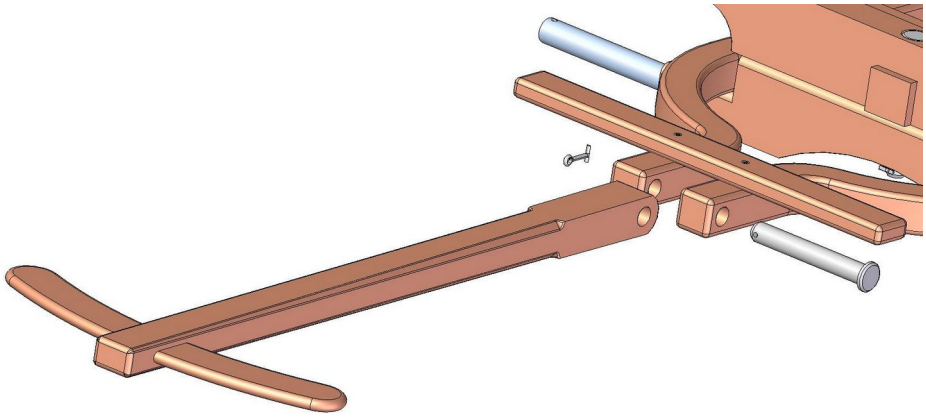

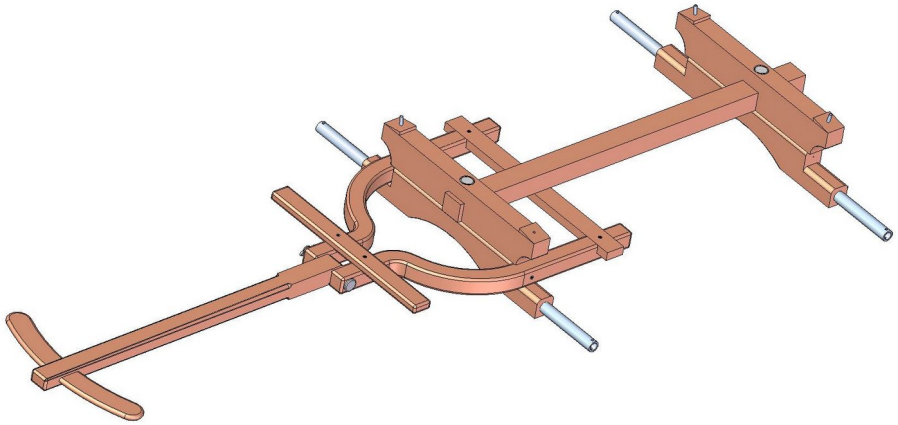

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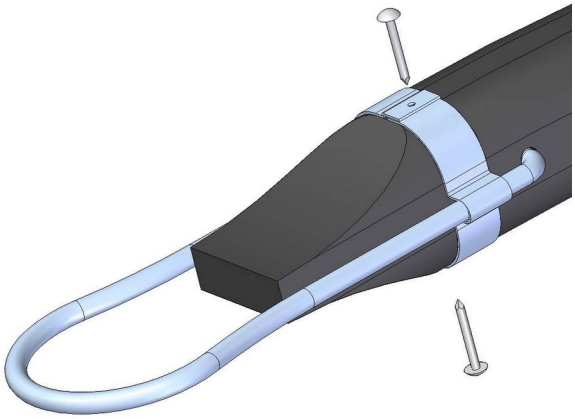
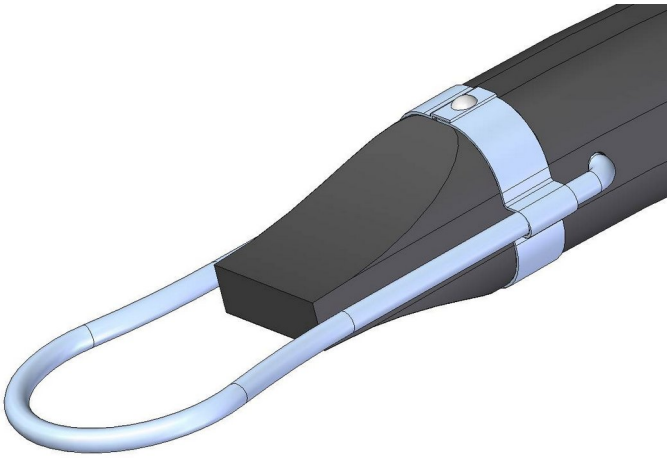
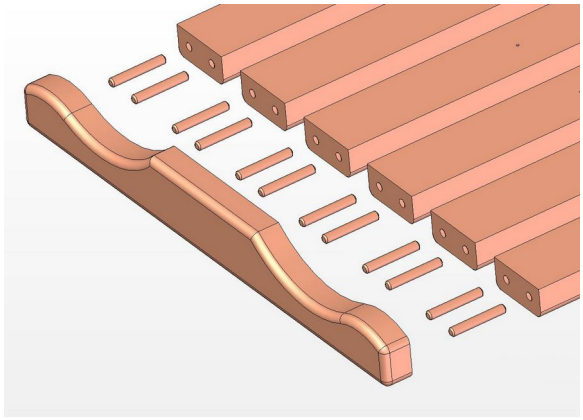
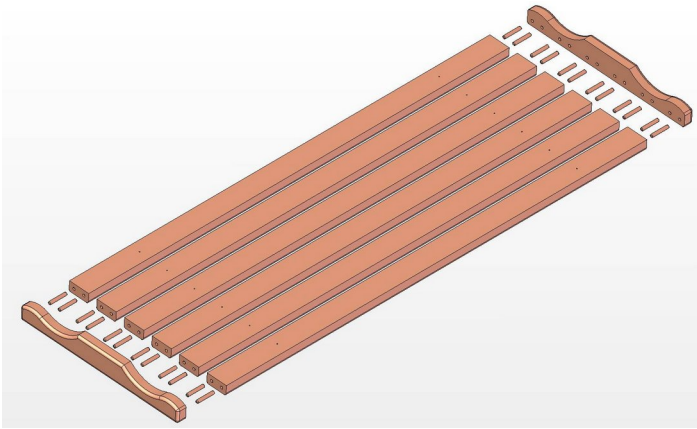


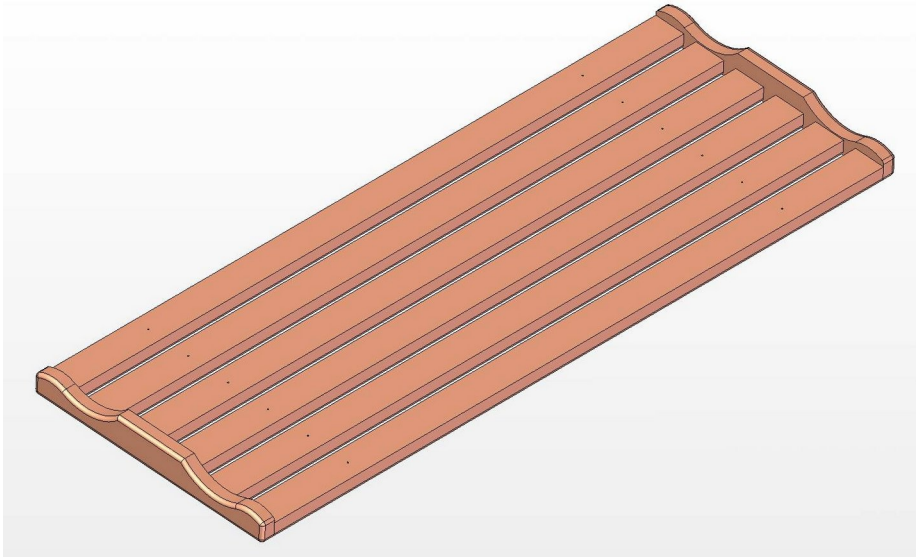


3. BOTTOM

1.







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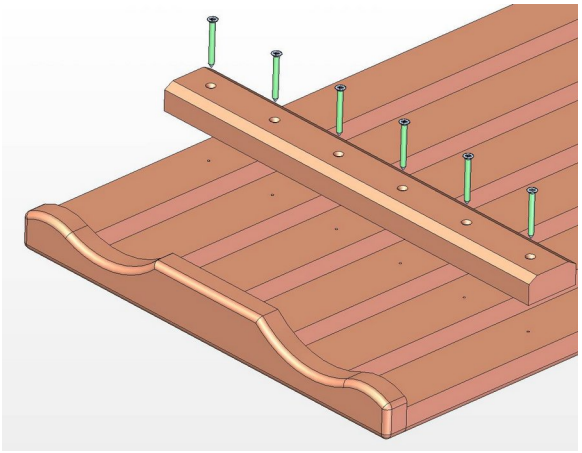

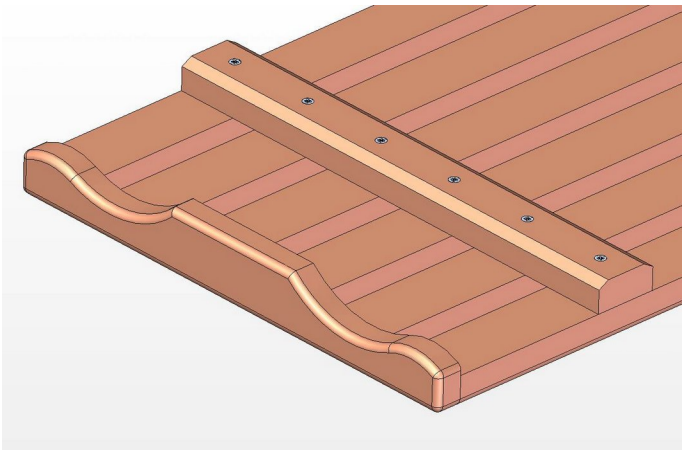

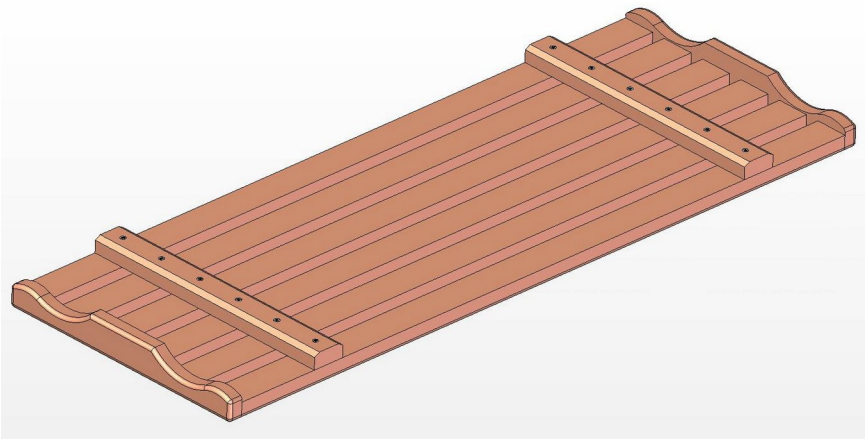

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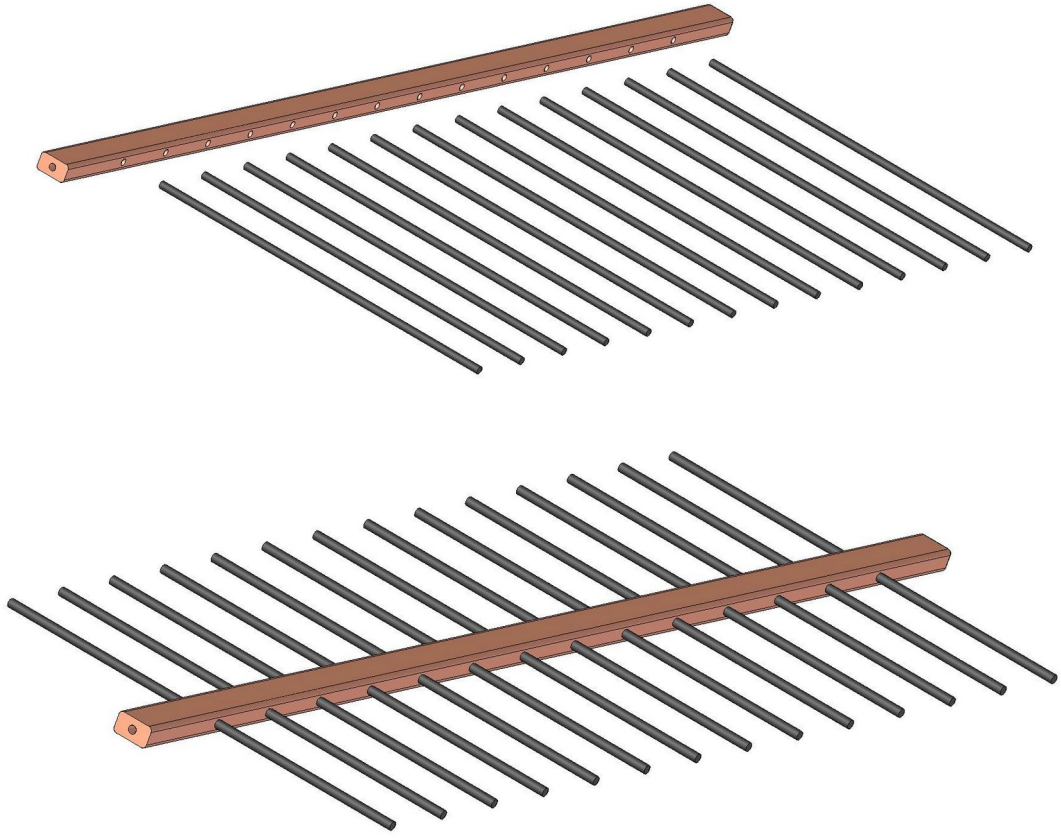

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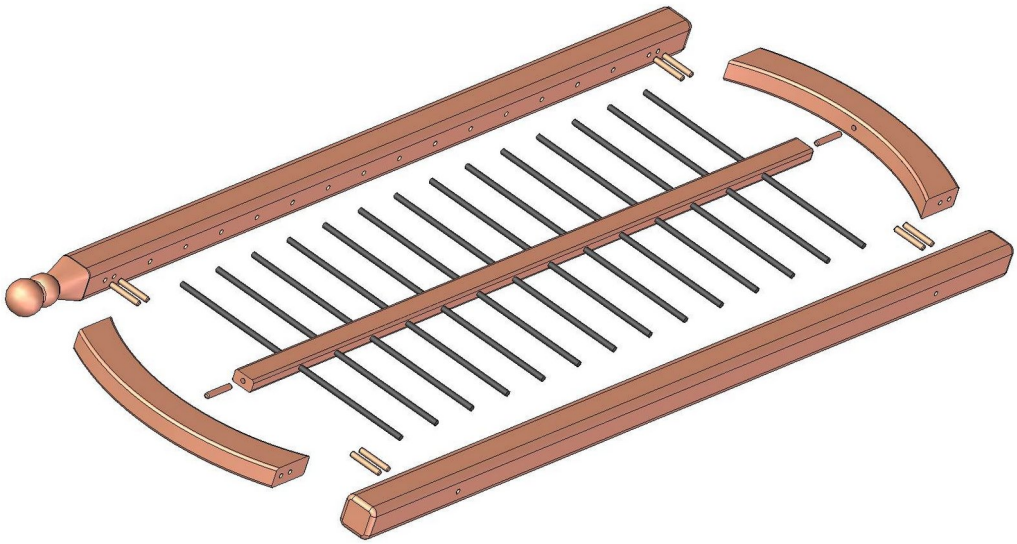

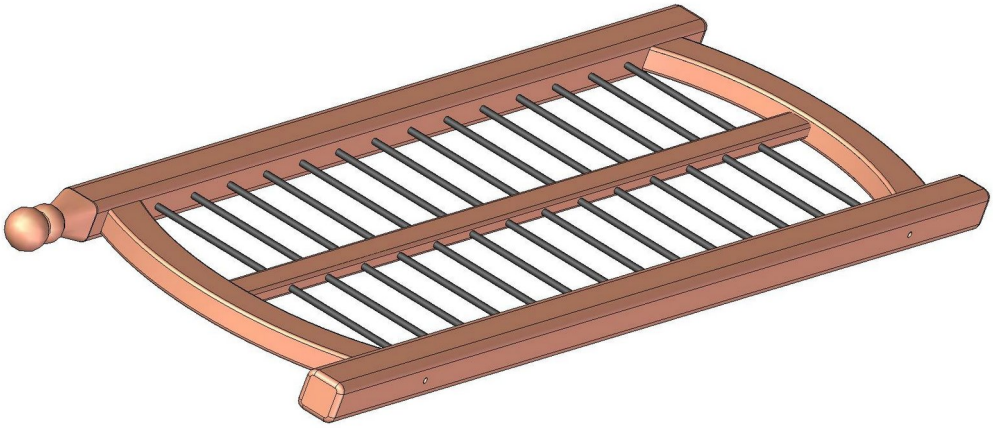

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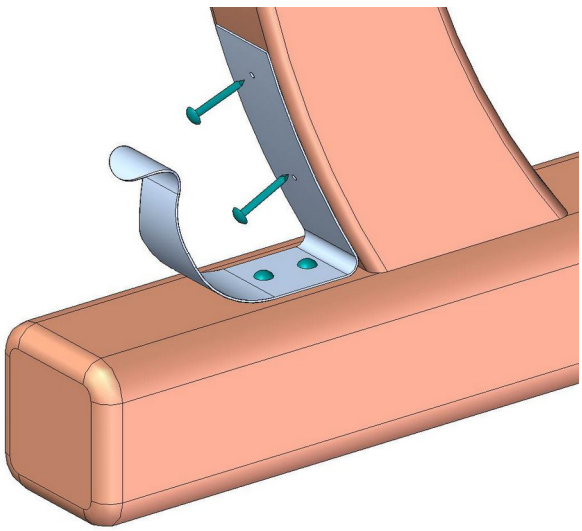

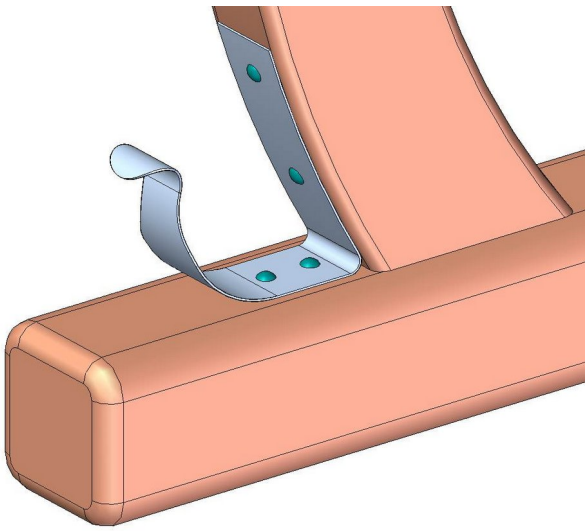

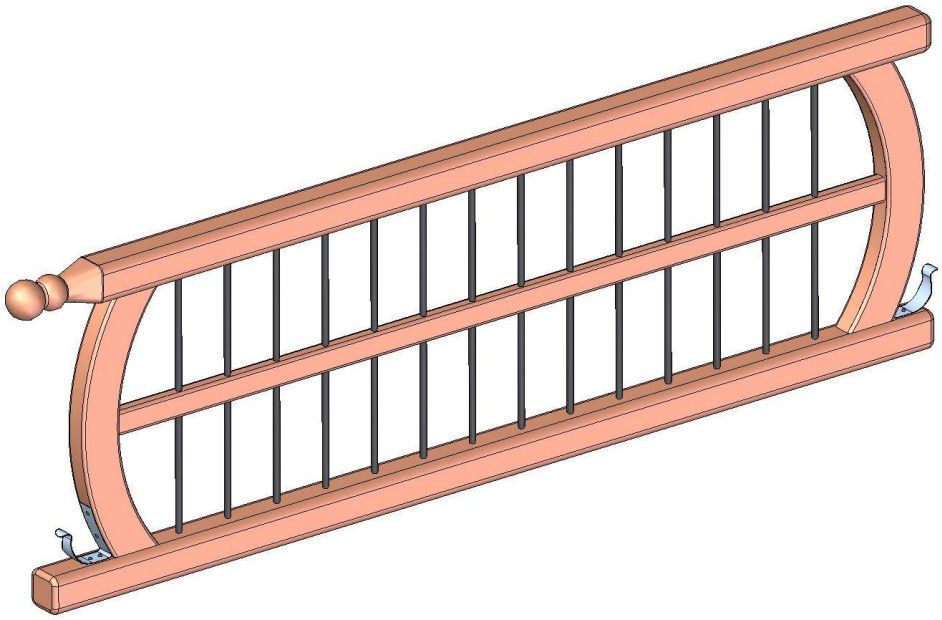

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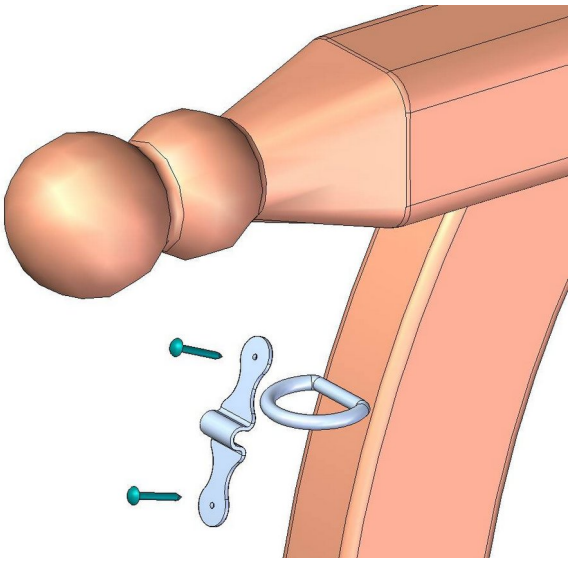

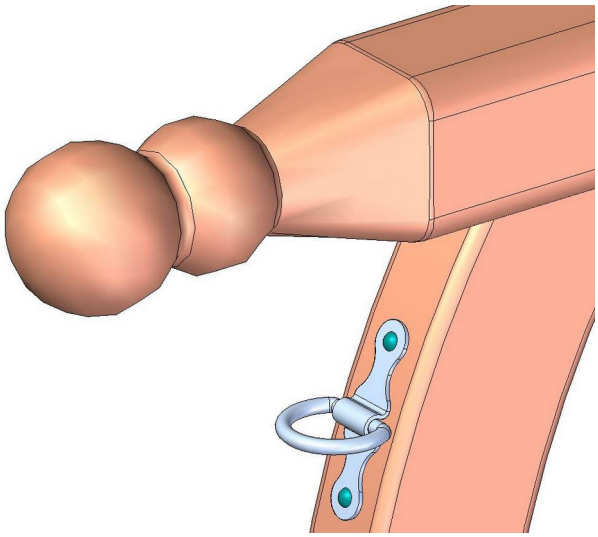

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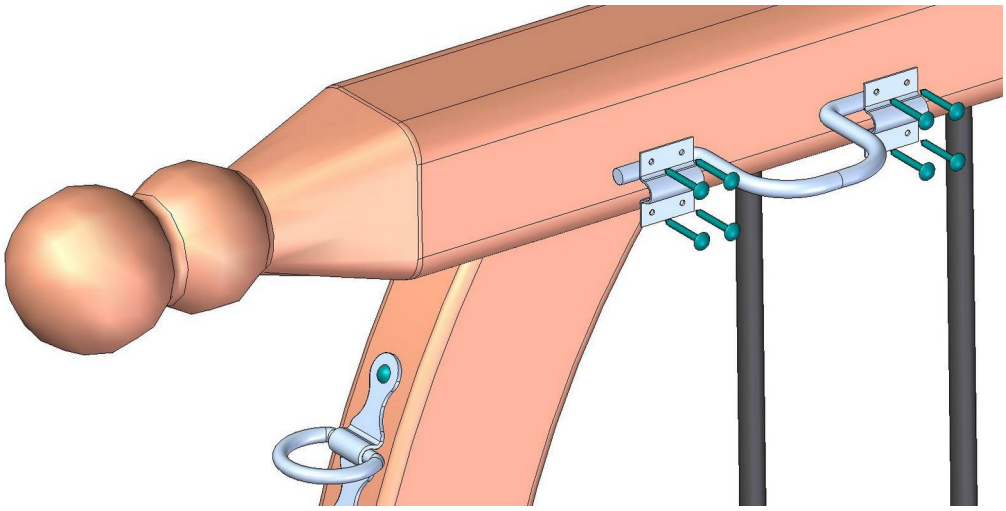

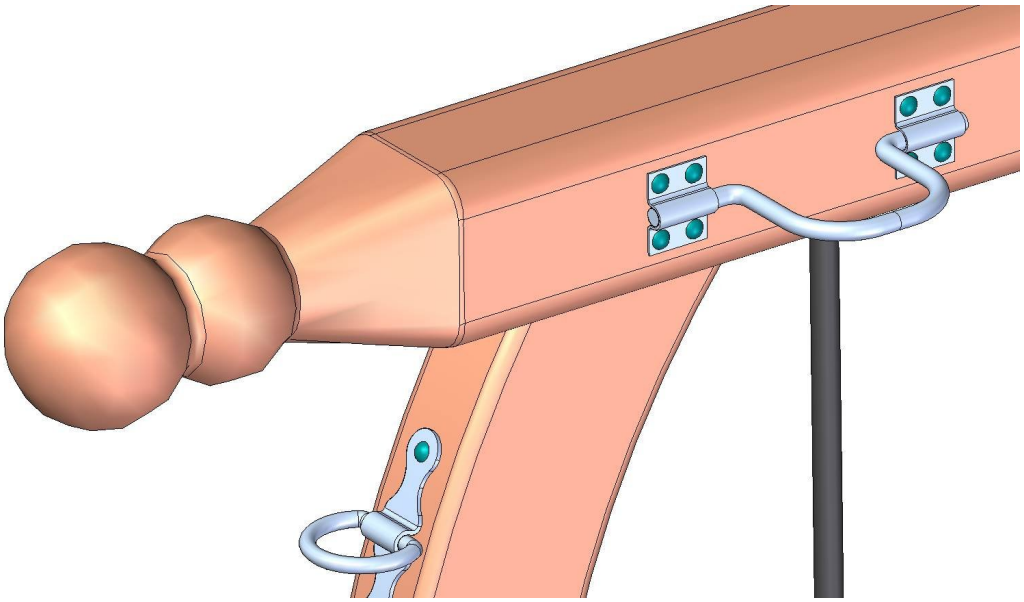

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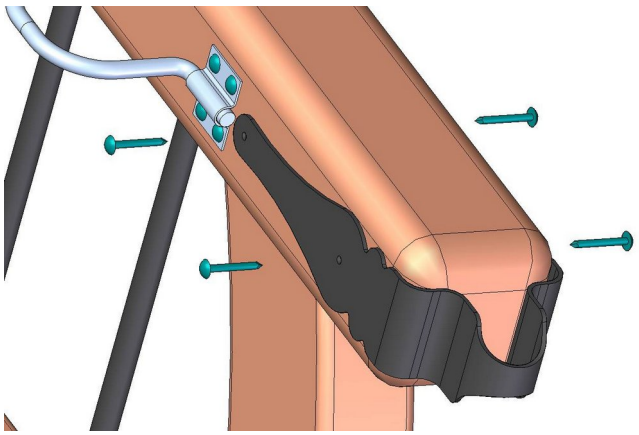

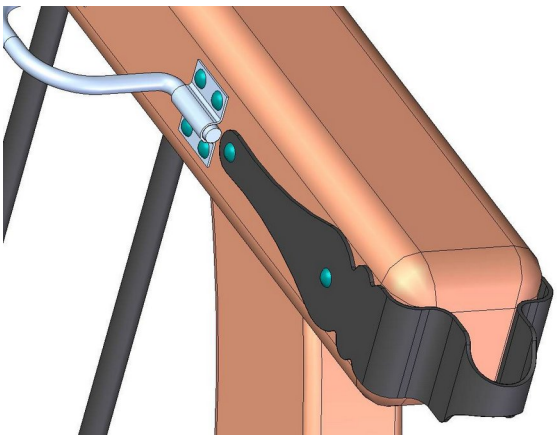

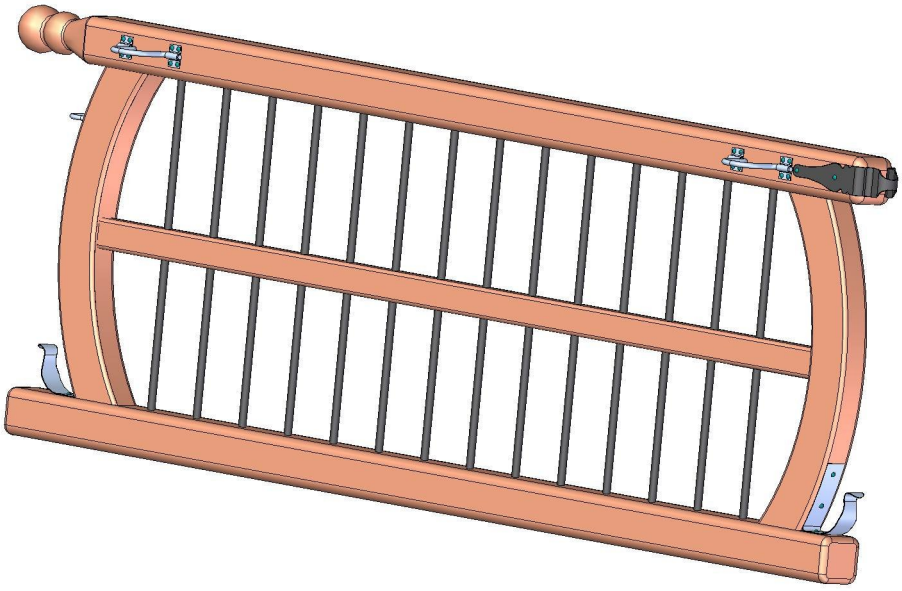

5. BACK SIDE

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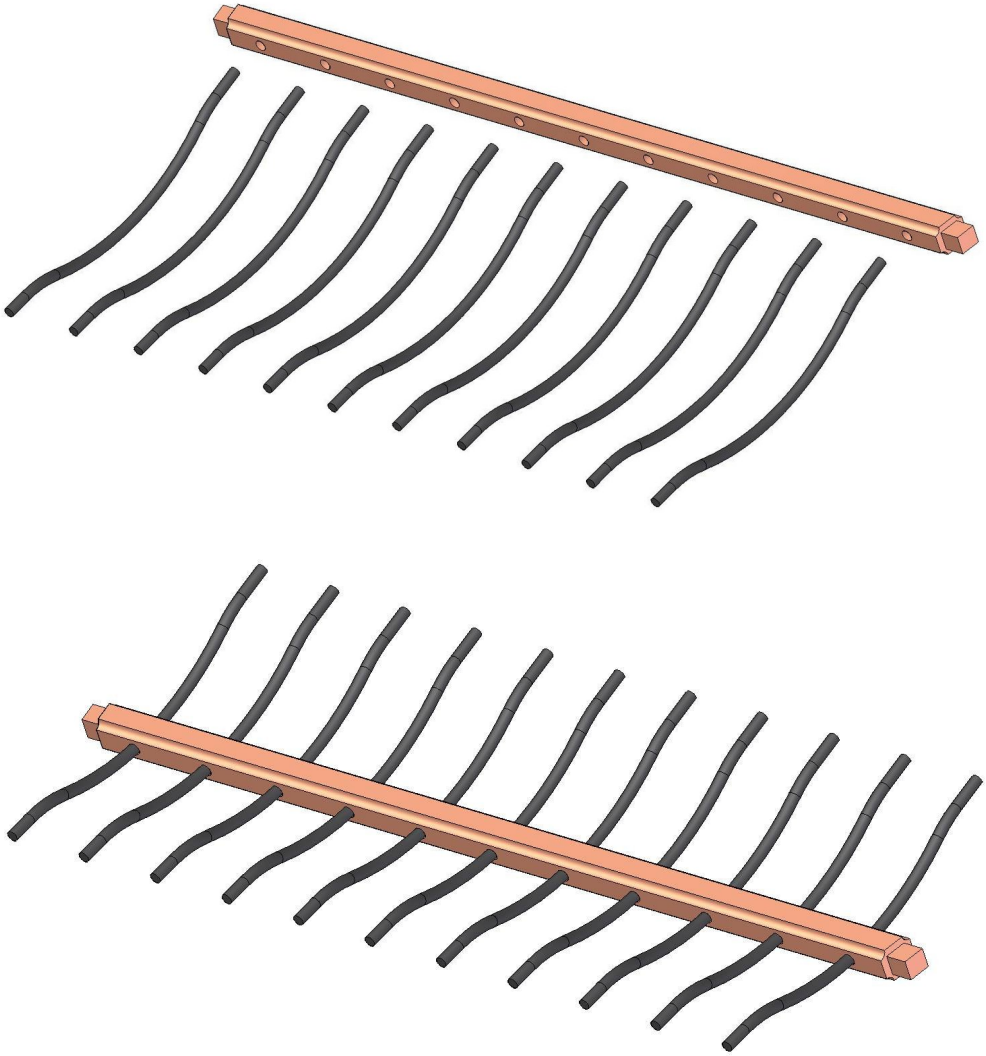

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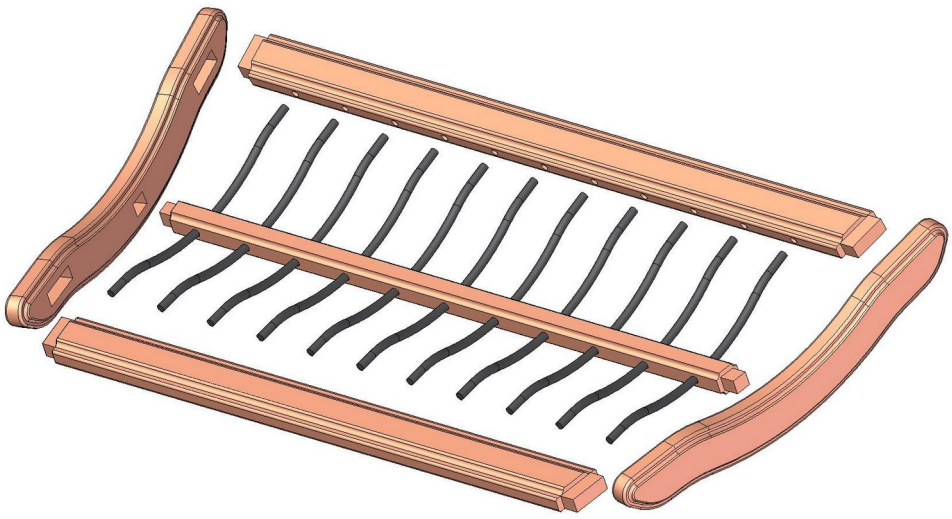

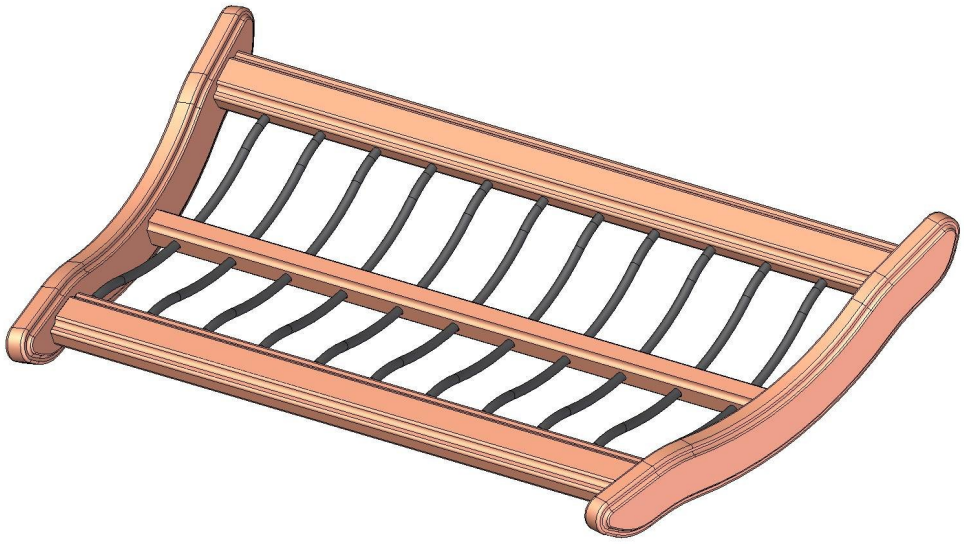

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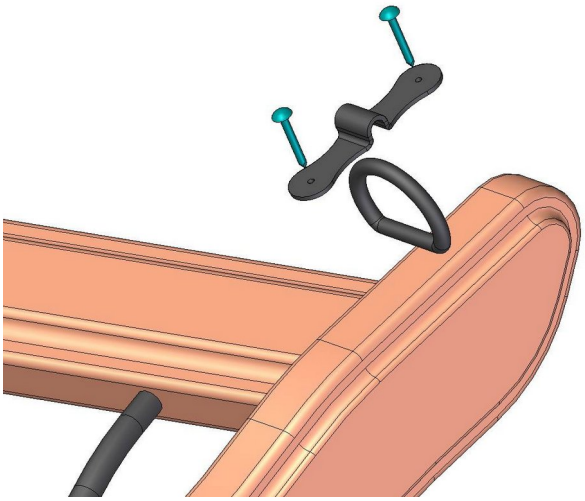

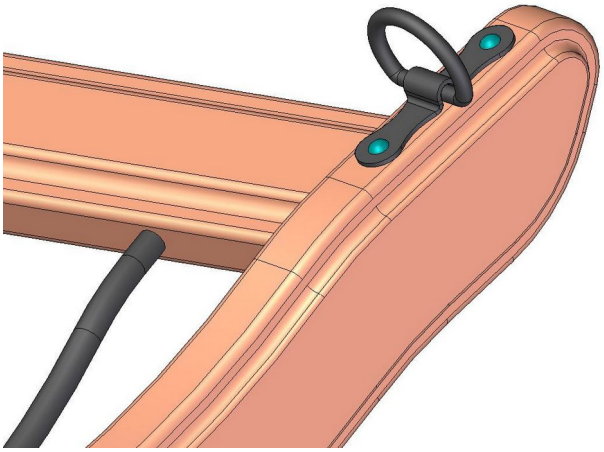

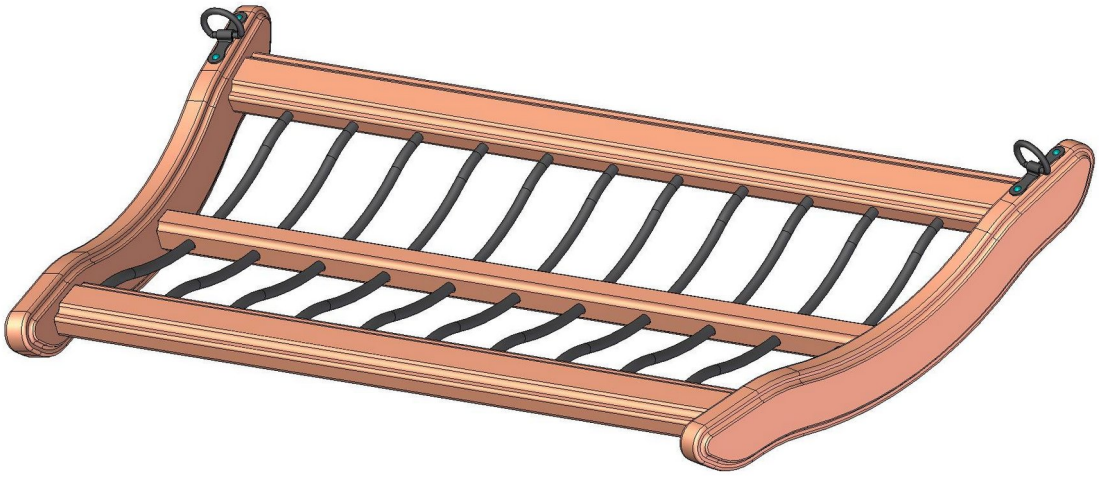

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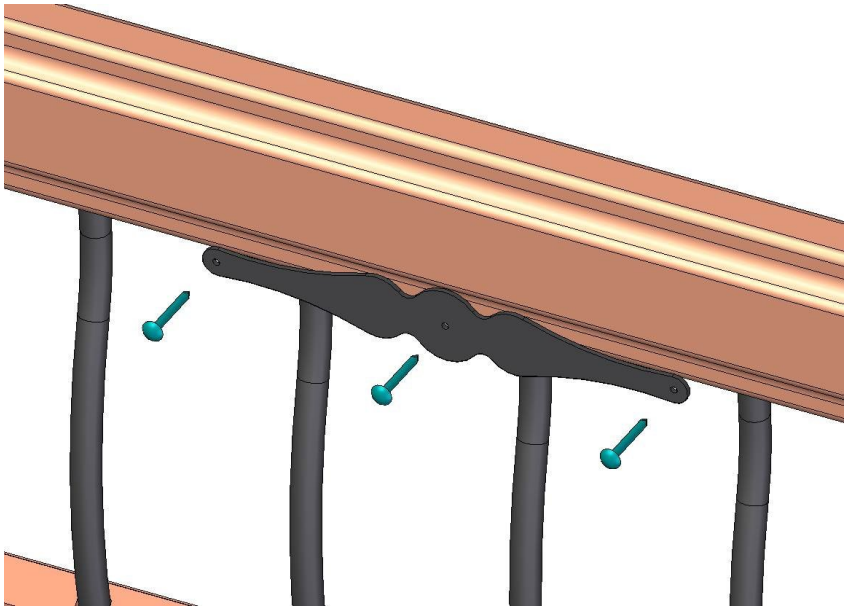

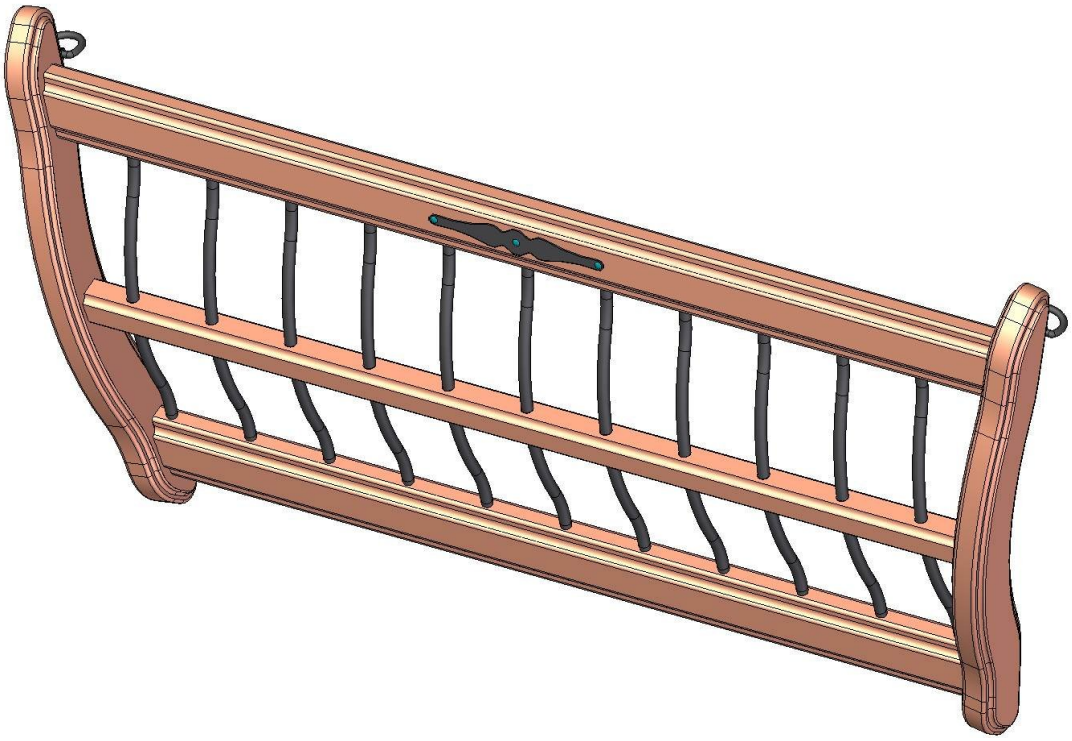

FRONT SIDE

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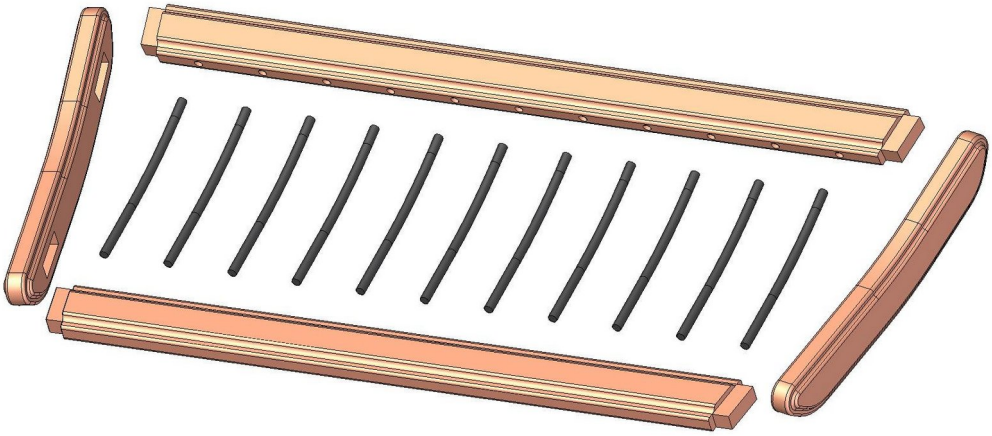

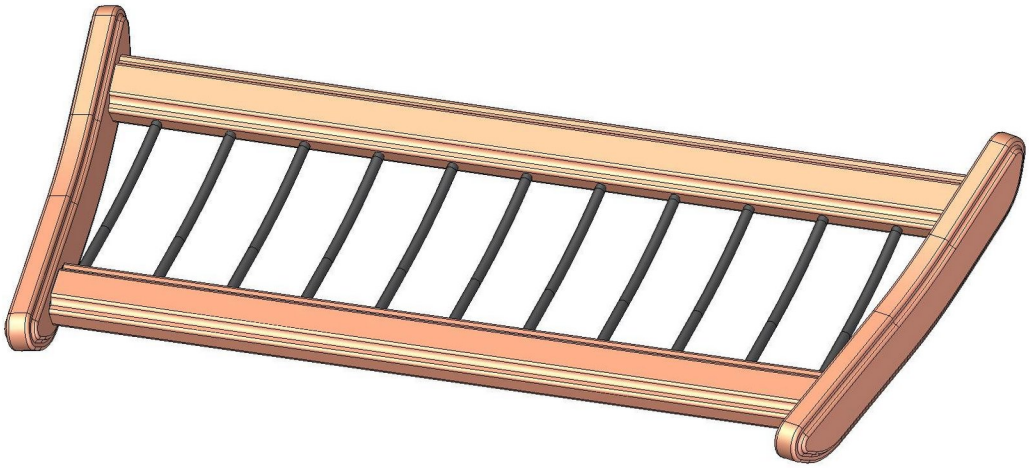

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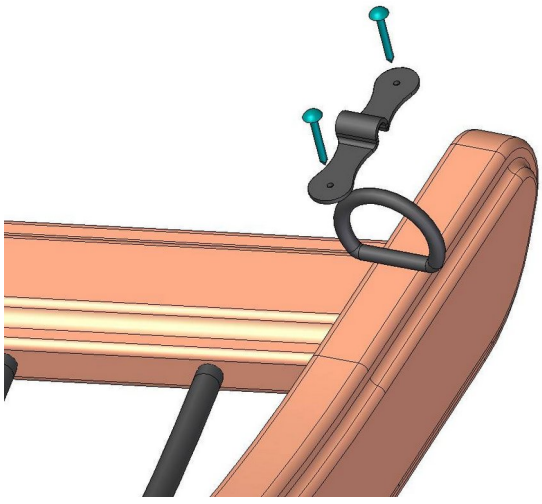

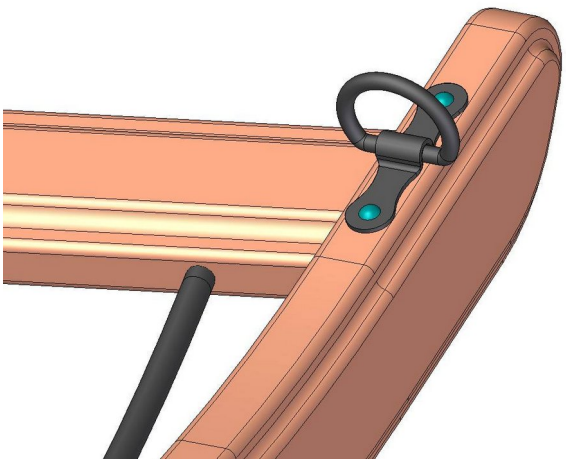

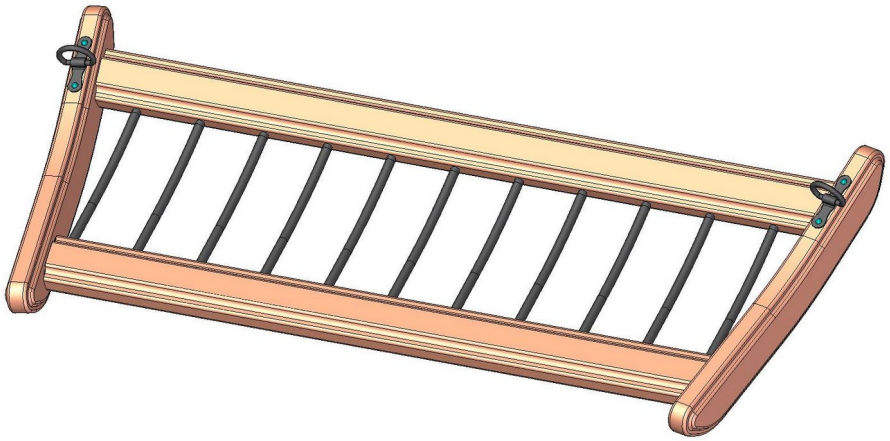

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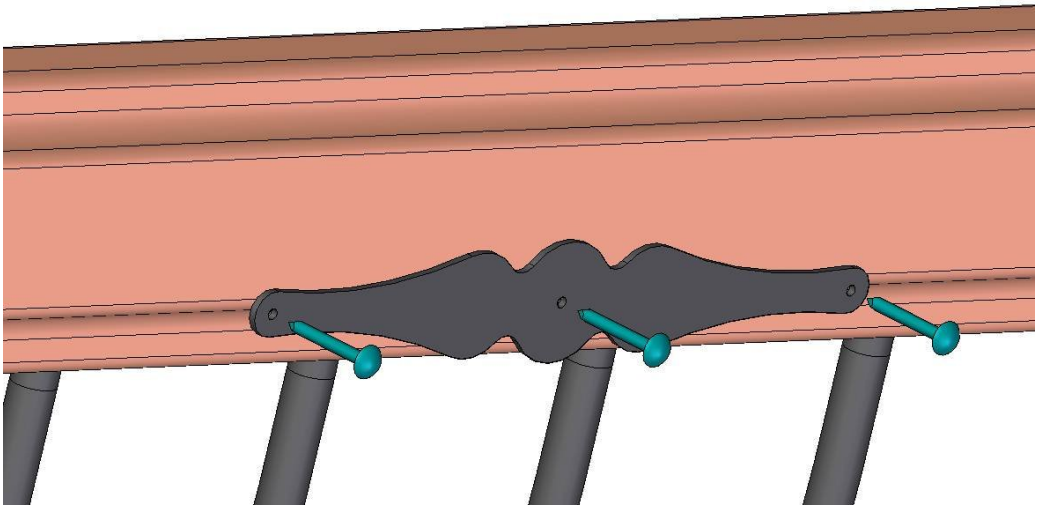
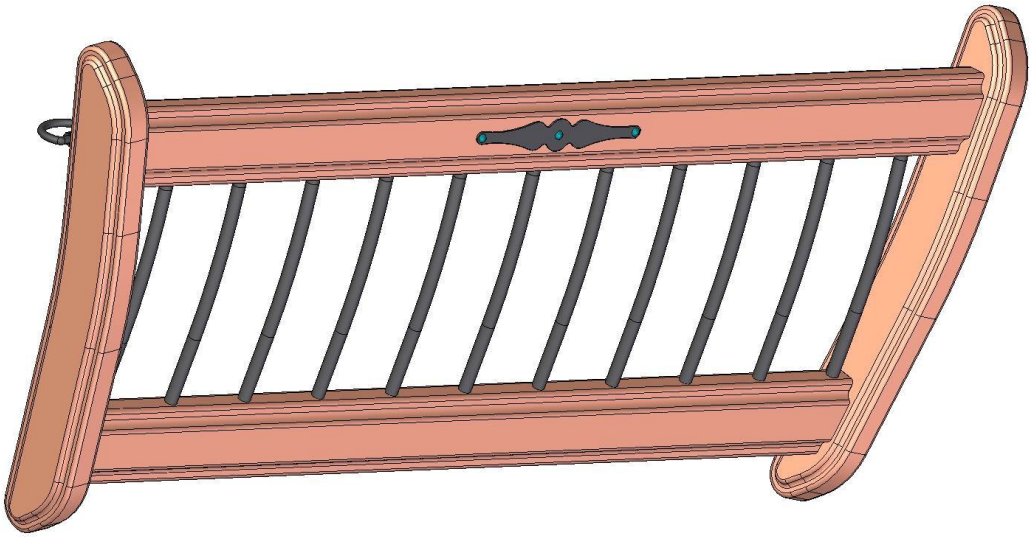
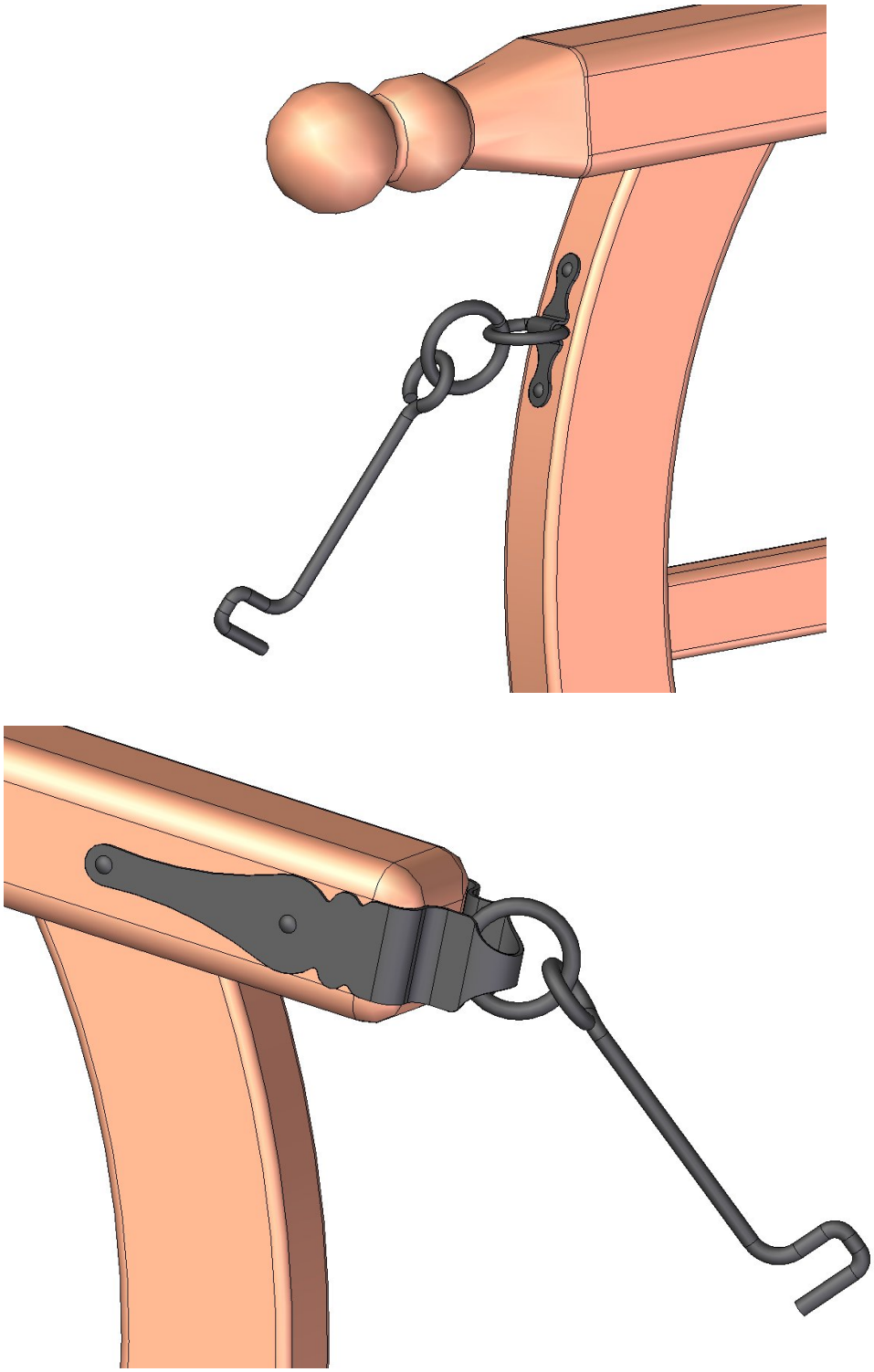




7. JOINT



SIDE MIRROR

The procedure is the same as for the subassembly 4.SIDE subassembly.

FINAL MONTAGE OF SUBASSEMBLIES

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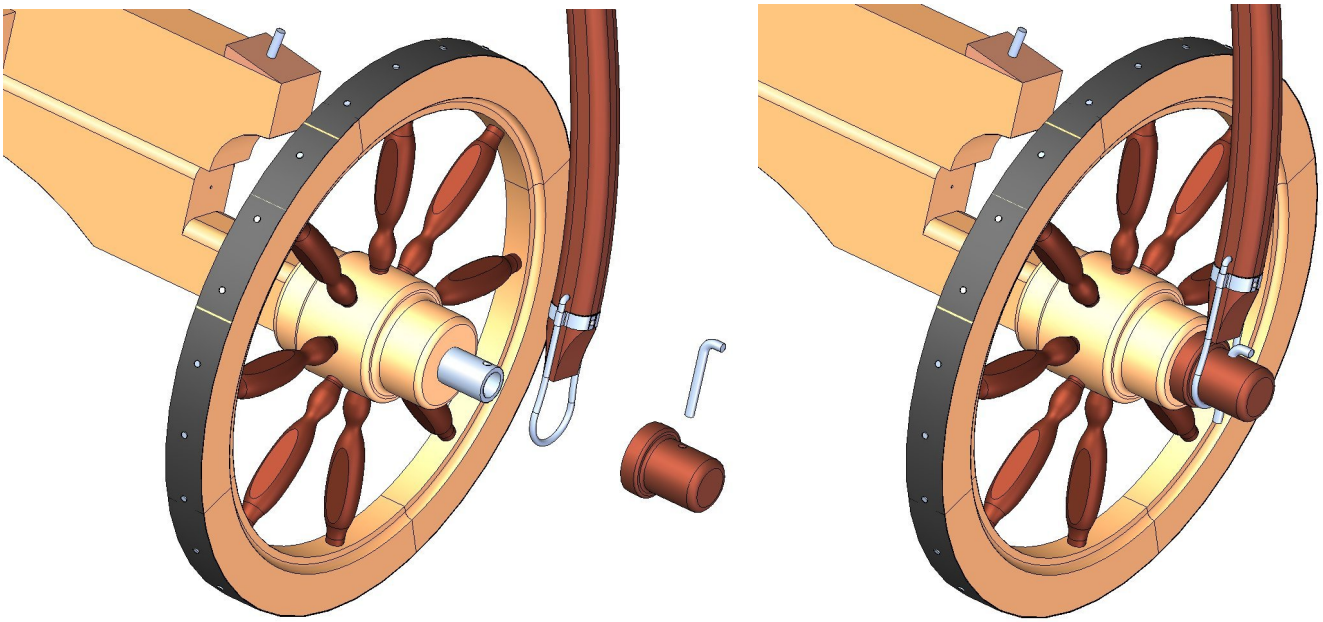

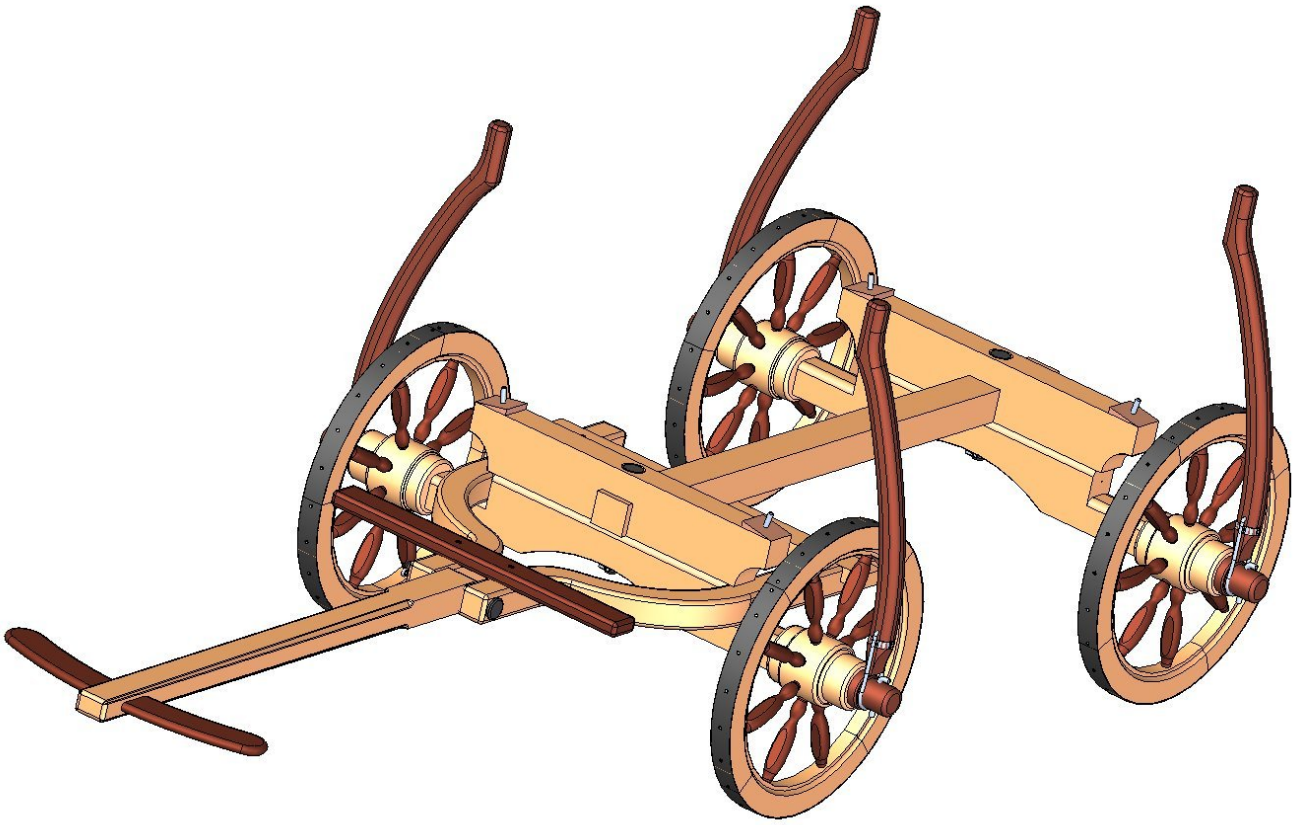

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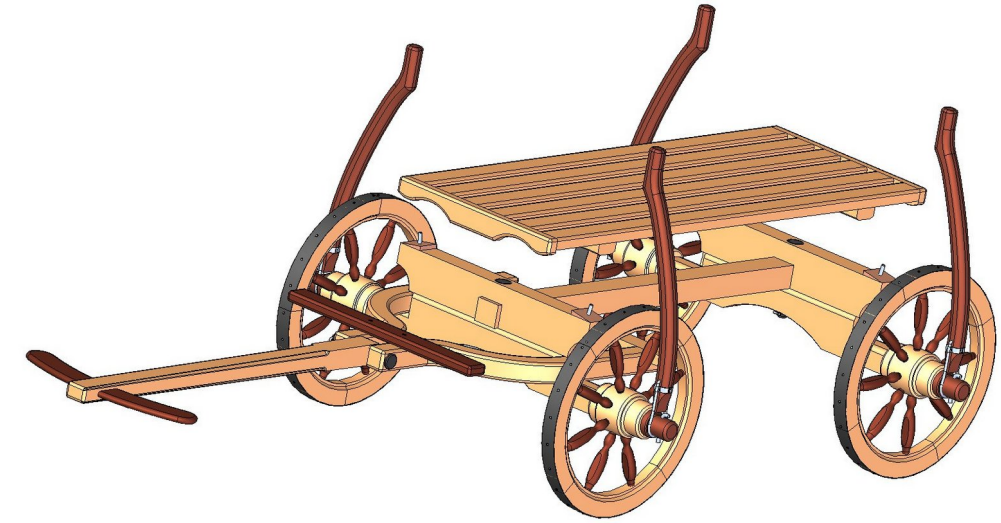

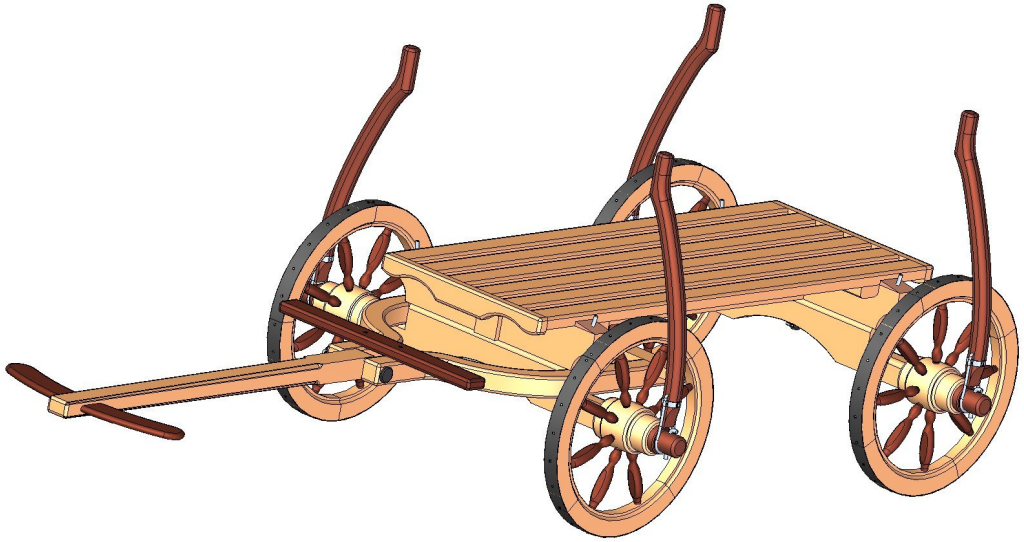

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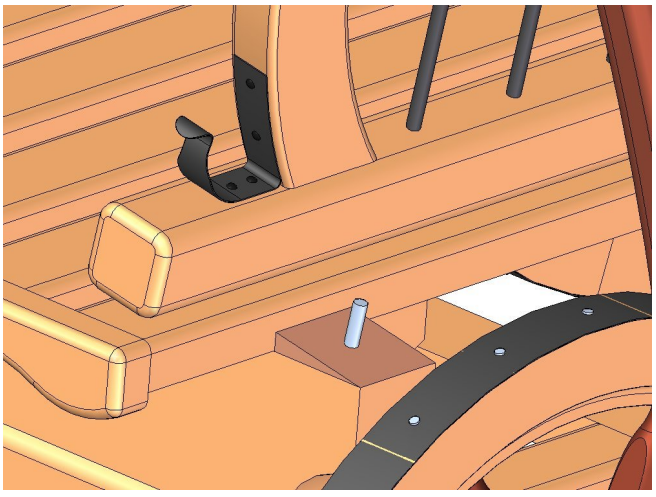

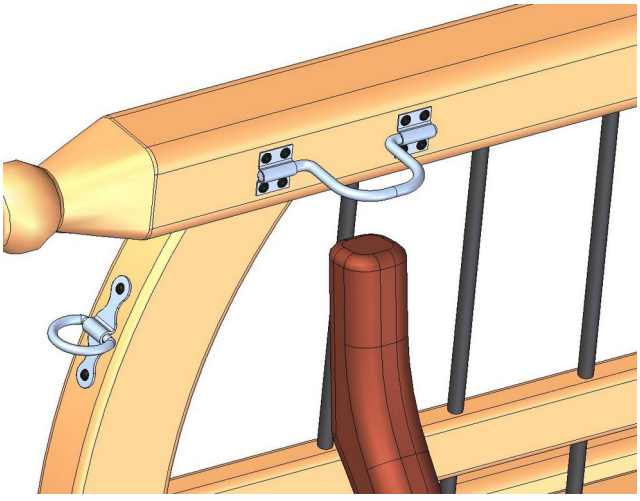

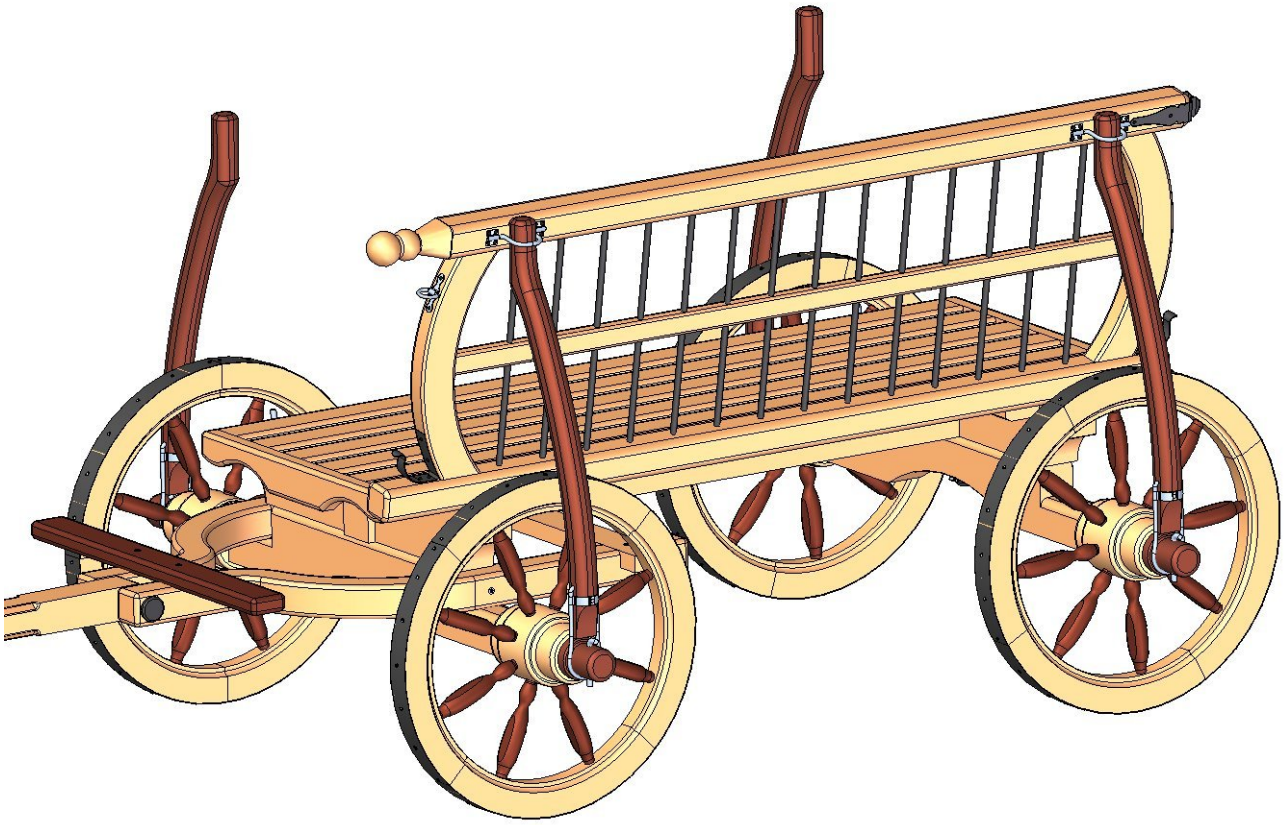

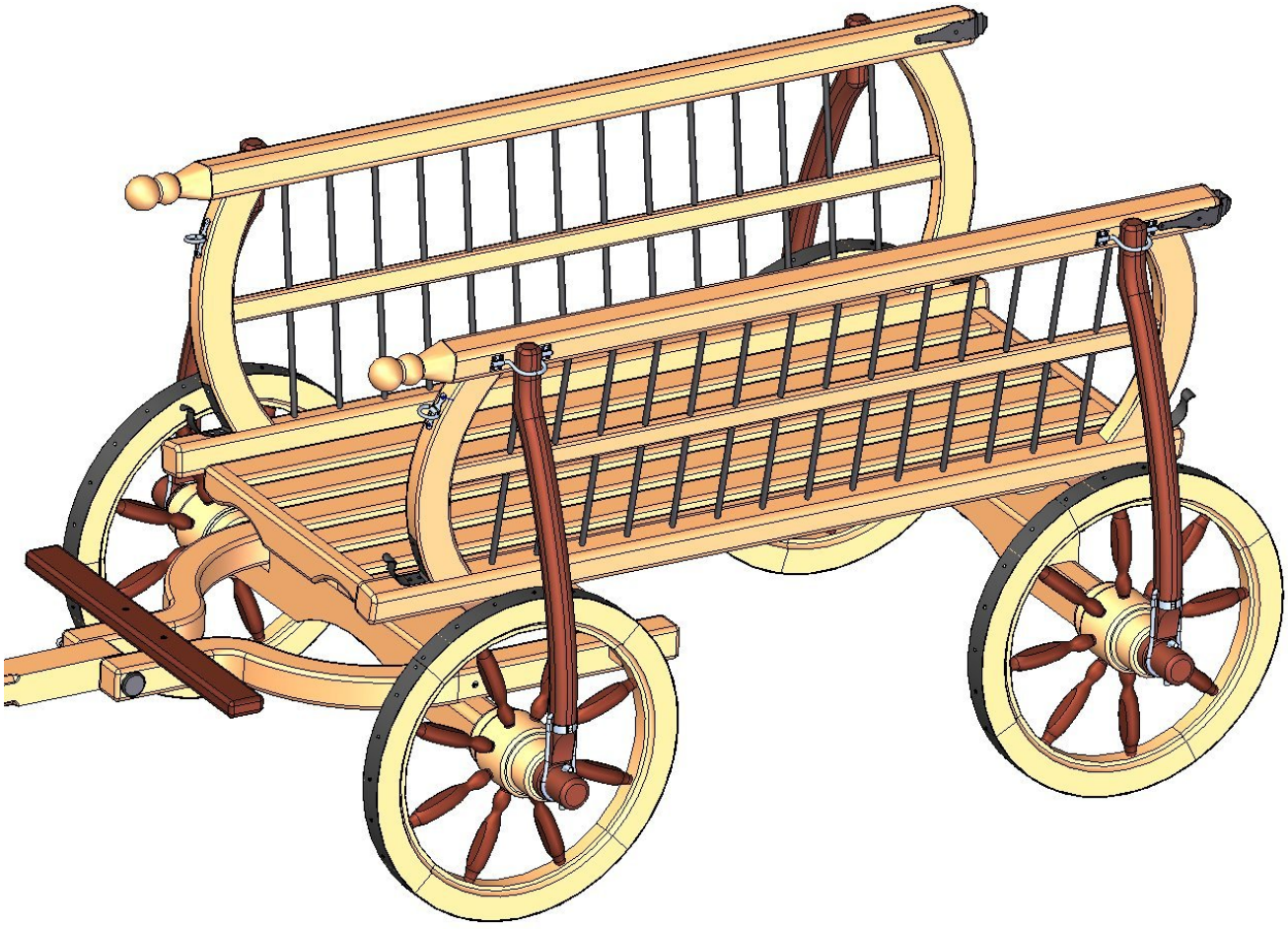

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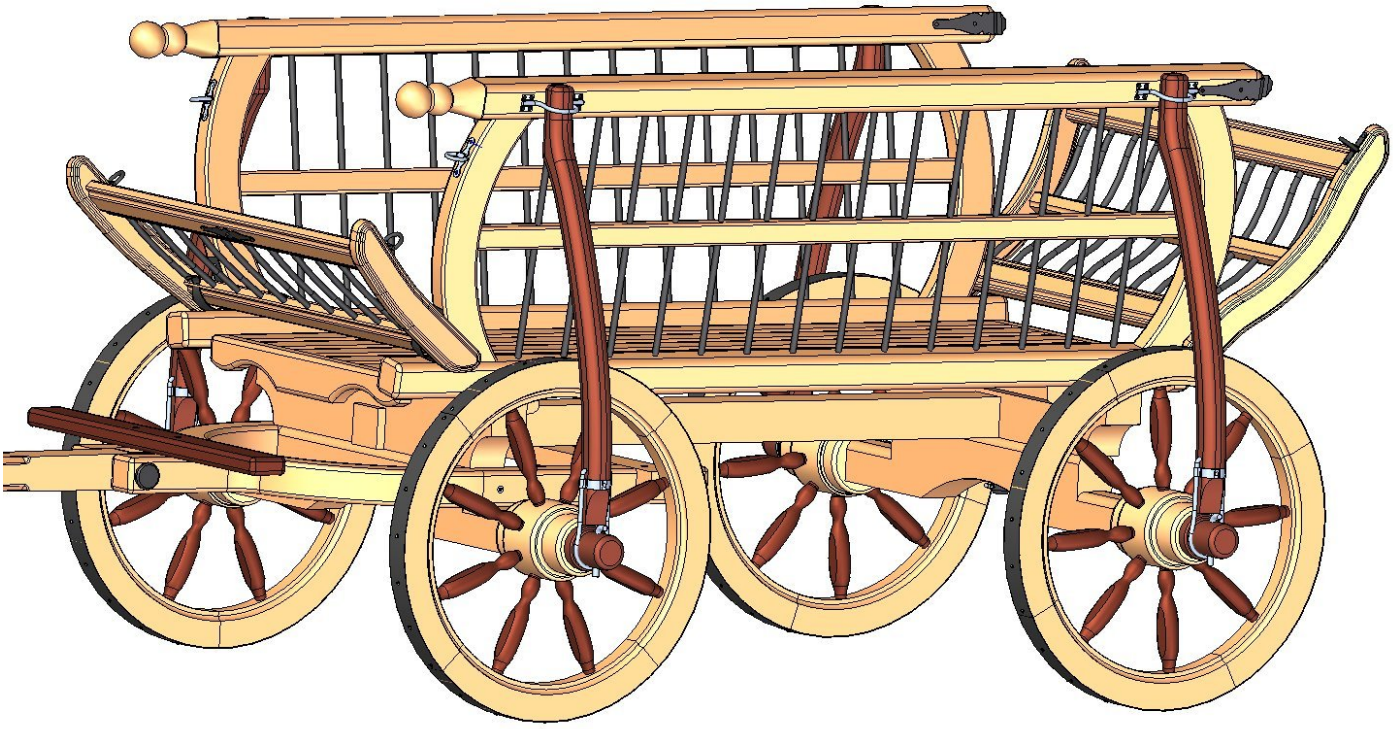

5.