

041 Aluminum Crossbar Assembly



Created by:
Joshua Vasquez

last edited:
4/12/2020

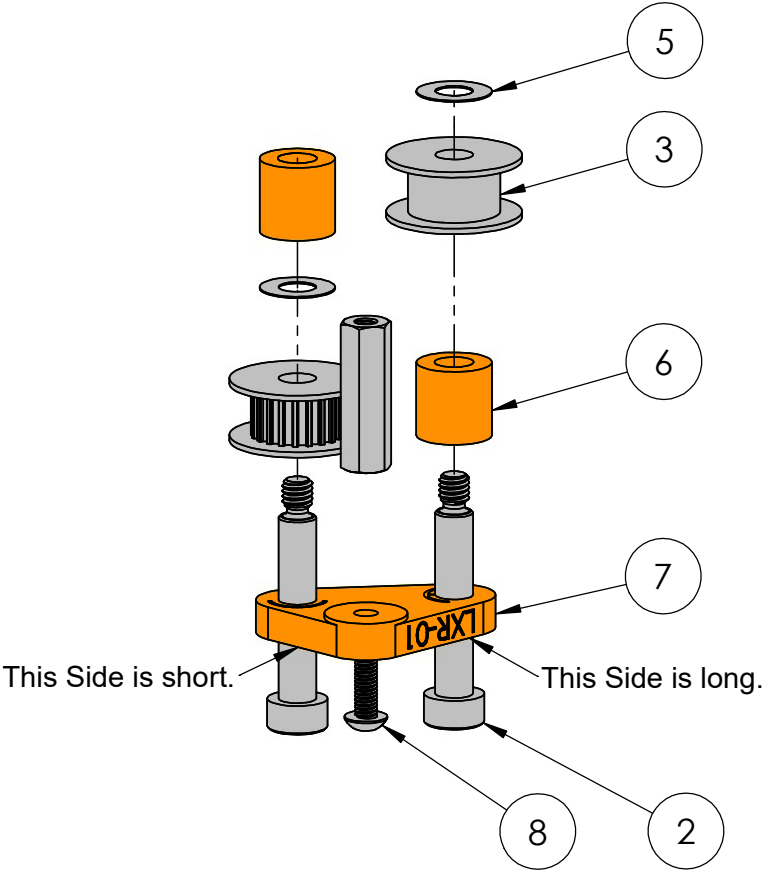
SCALE: 1:2

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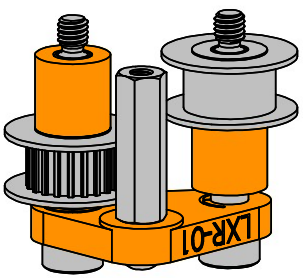
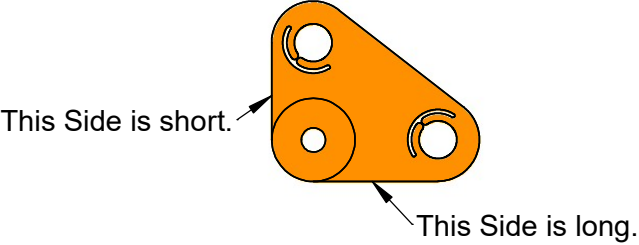
B

A

Note: This assembly step is for the **generic** brand pulleys only. If you are using genuine **Gates** brand pulleys, skip this page and see the next page.



Note the orientation of the Reinforcement Plate



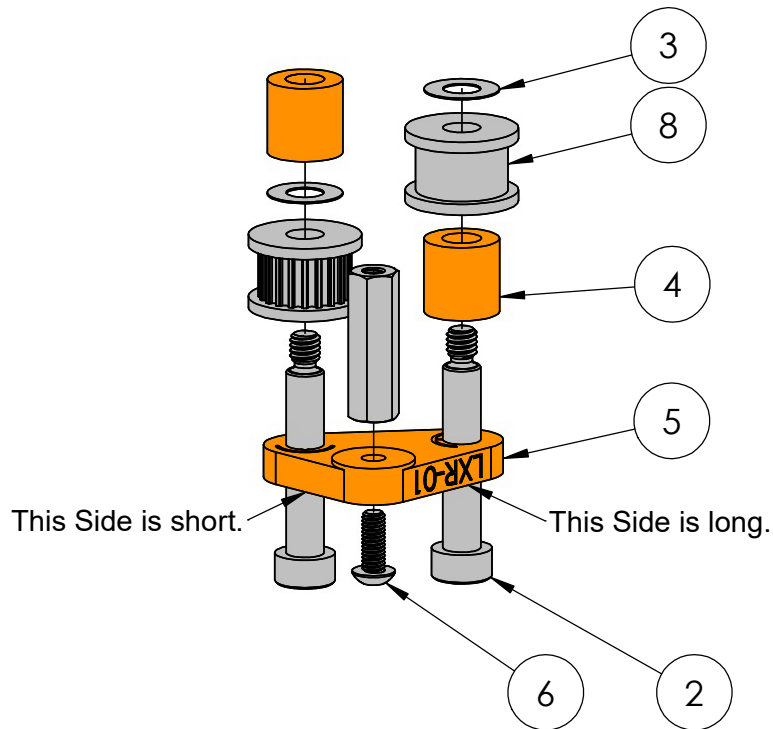
| ITEM NO. | DESCRIPTION | |
|----------|--|---|
| 1 | M3 20mm standoff, 6mm wide | 1 |
| 2 | M4 Shoulder Screw, 25mm long | 2 |
| 3 | 20T toothless idler, 5mm bore | 1 |
| 4 | 20T Idler pulley, 2GT, 5mm bore | 1 |
| 5 | M5 Shim, 0.2mm thick | 2 |
| 6 | Printed Pulley Spacer | 2 |
| 7 | Left Crossbar Pulley Reinforcement Plate | 1 |
| 8 | M3 Buttonhead Screw, 8mm long | 1 |

| Left Crossbar Generic Pulley Assembly | | |
|---------------------------------------|-------------------------------|---------------------------|
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| | SCALE: 1:1 | SHEET 2 OF 8 |

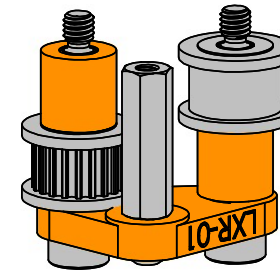
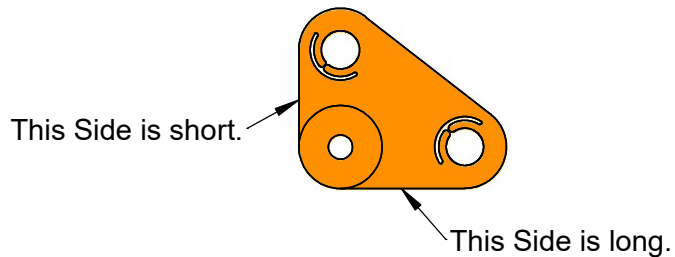
B

A

Note: This assembly step is for the genuine **Gates** brand pulleys only. If you are using **generic** brand pulleys, skip this page.



Note the orientation of the Reinforcement Plate



| ITEM NO. | DESCRIPTION | |
|----------|--|---|
| 1 | M3 20mm standoff, 6mm wide | 1 |
| 2 | M4 Shoulder Screw, 25mm long | 2 |
| 3 | 20T toothless idler, 5mm bore | 1 |
| 4 | 20T Idler pulley, 2GT, 5mm bore | 1 |
| 5 | M5 Shim, 0.2mm thick | 2 |
| 6 | Printed Pulley Spacer | 2 |
| 7 | Left Crossbar Pulley Reinforcement Plate | 1 |
| 8 | M3 Buttonhead Screw, 8mm long | 1 |

Left Crossbar Gates Pulley Assembly

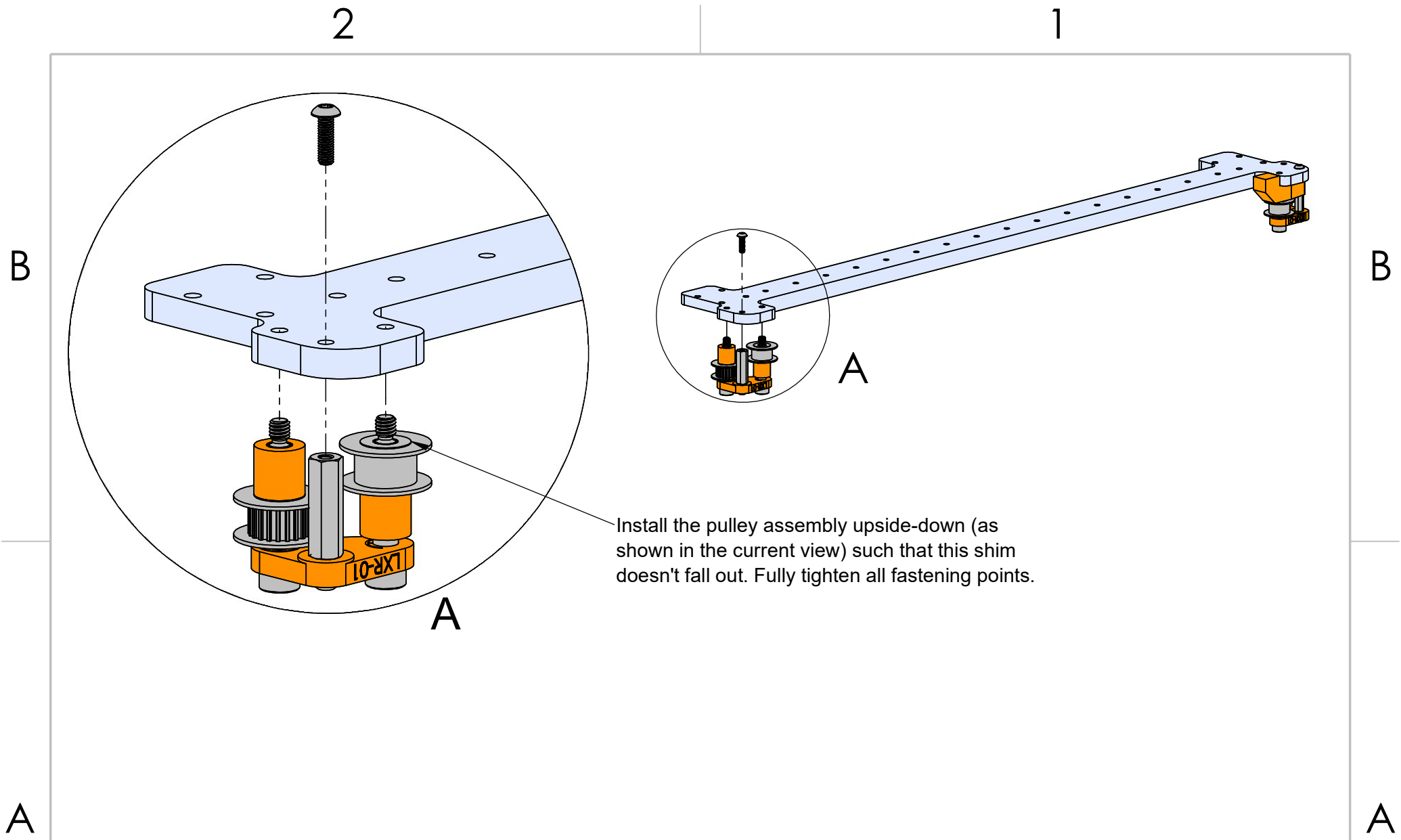


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4/12/2020

SCALE: 1:1

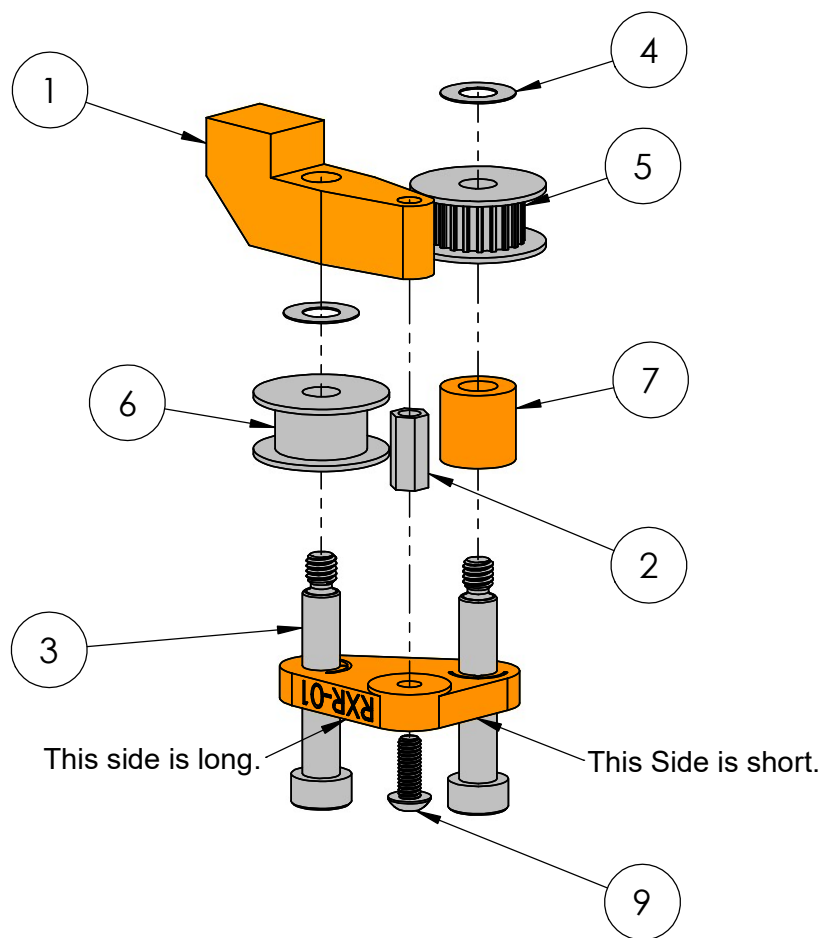
SHEET 3 OF 8



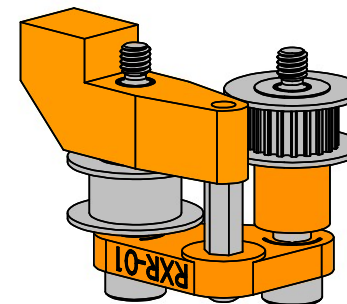
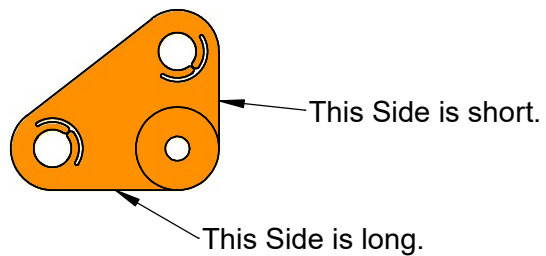
| ITEM NO. | DESCRIPTION | QTY. |
|----------|--------------------------------|------|
| 1 | Pocketed Crossbar | 1 |
| 2 | Left Crossbar Pulley Assembly | 1 |
| 3 | M3 Buttonhead Screw, 10mm long | 1 |

| Left Crossbar Pulley Installation | | |
|-----------------------------------|----------------|--------------|
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| | SCALE: 1:3 | SHEET 4 OF 8 |

Note: This assembly step is for the **generic** brand pulleys only. If you are using genuine **Gates** brand pulleys, skip this page and see the next page.



Note the orientation of the Reinforcement Plate



| ITEM NO. | DESCRIPTION | |
|----------|---|---|
| 1 | Crossbar X Limit Trigger | 1 |
| 2 | M3 10mm standoff, 4.5mm wide | 1 |
| 3 | M4 Shoulder Screw, 25mm long | 2 |
| 4 | M5 Shim, 0.2mm thick | 2 |
| 5 | 20T Idler pulley, 2GT, 5mm bore | 1 |
| 6 | 20T toothless idler, 5mm bore | 1 |
| 7 | Printed Pulley Spacer | 1 |
| 8 | Right Crossbar Pulley Reinforcement Plate | 1 |
| 9 | M3 Buttonhead Screw, 8mm long | 1 |

Right Crossbar Generic Pulley Assembly



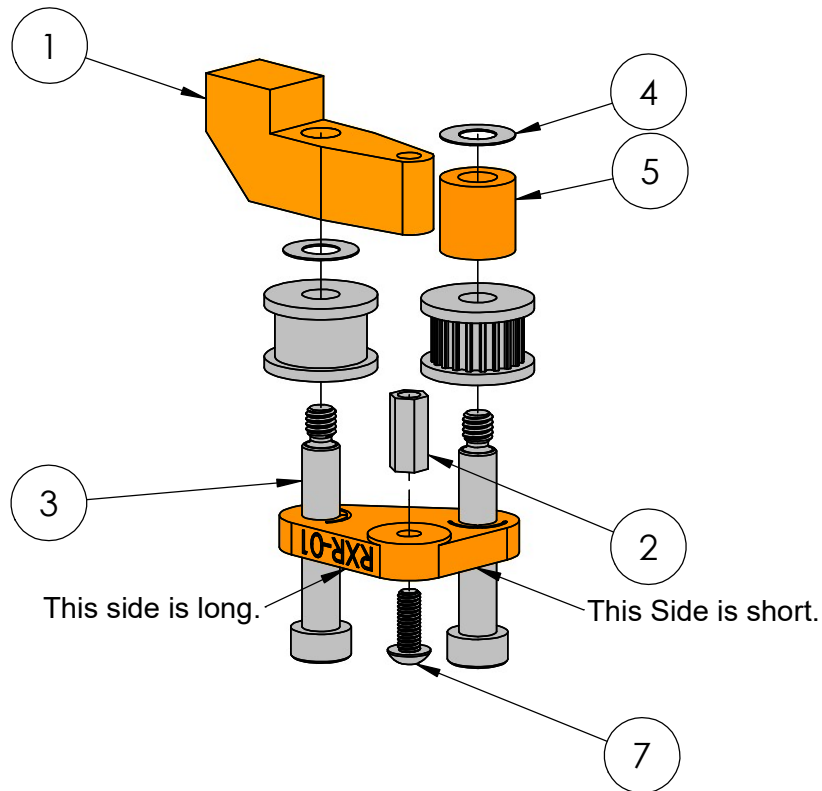
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4/12/2020

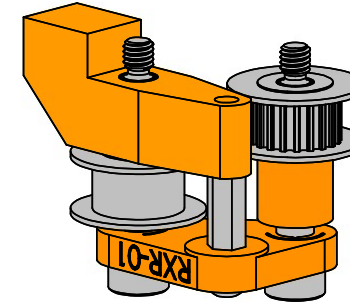
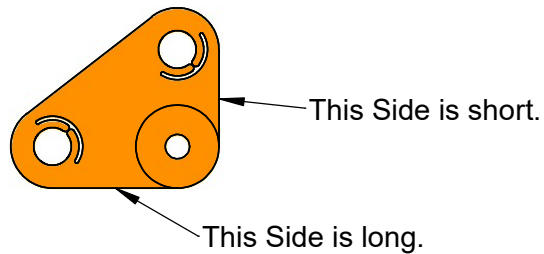
SCALE: 1:1

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Note: This assembly step is for the genuine **Gates** brand pulleys only. If you are using **generic** brand pulleys, skip this page.



Note the orientation of the Reinforcement Plate



| ITEM NO. | DESCRIPTION | |
|----------|---|---|
| 1 | Crossbar X Limit Trigger | 1 |
| 2 | M3 10mm standoff, 4.5mm wide | 1 |
| 3 | M4 Shoulder Screw, 25mm long | 2 |
| 4 | M5 Shim, 0.2mm thick | 2 |
| 5 | 20T Idler pulley, 2GT, 5mm bore | 1 |
| 6 | 20T toothless idler, 5mm bore | 1 |
| 7 | Printed Pulley Spacer | 1 |
| 8 | Right Crossbar Pulley Reinforcement Plate | 1 |
| 9 | M3 Buttonhead Screw, 8mm long | 1 |

Right Crossbar Gates Pulley Assembly

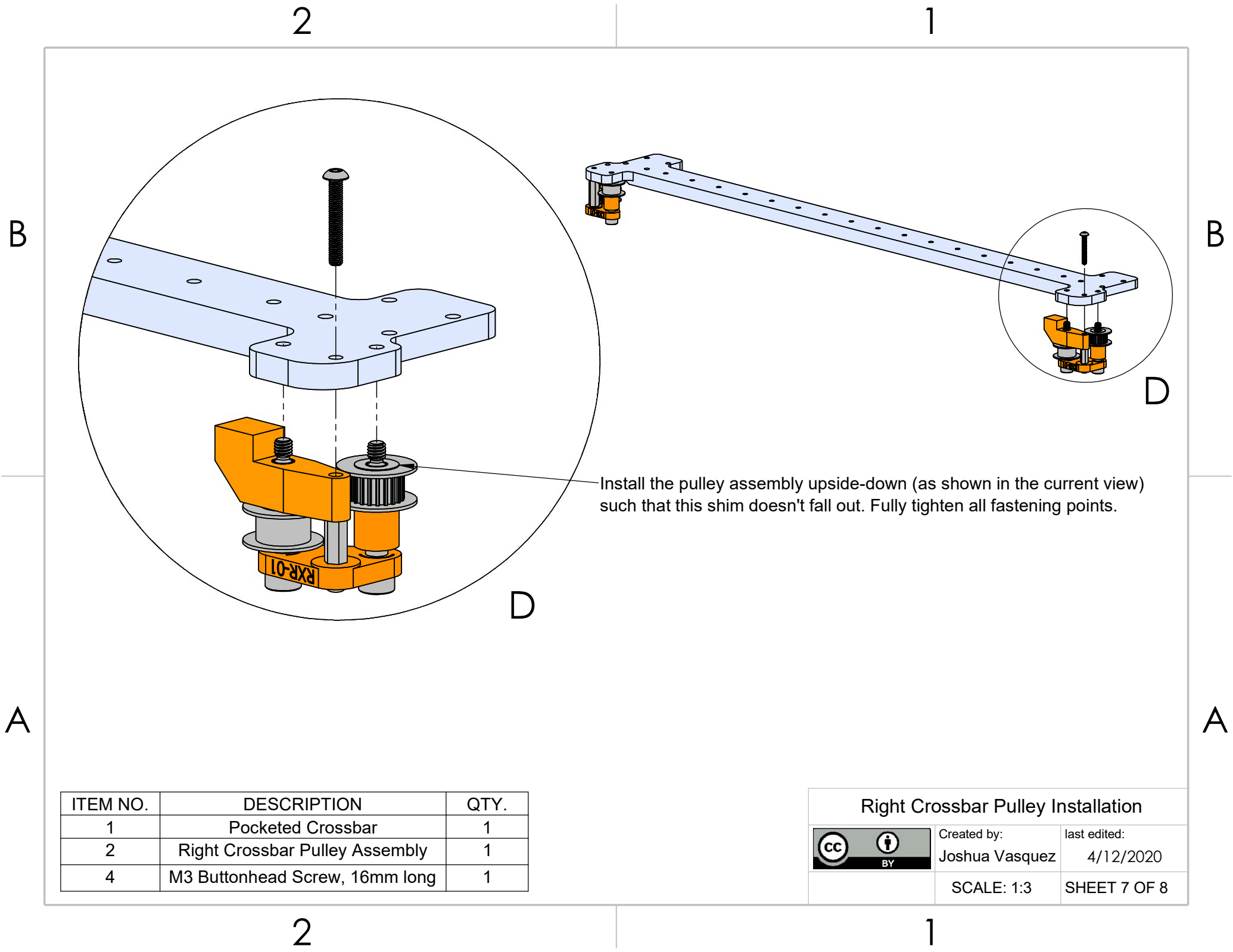


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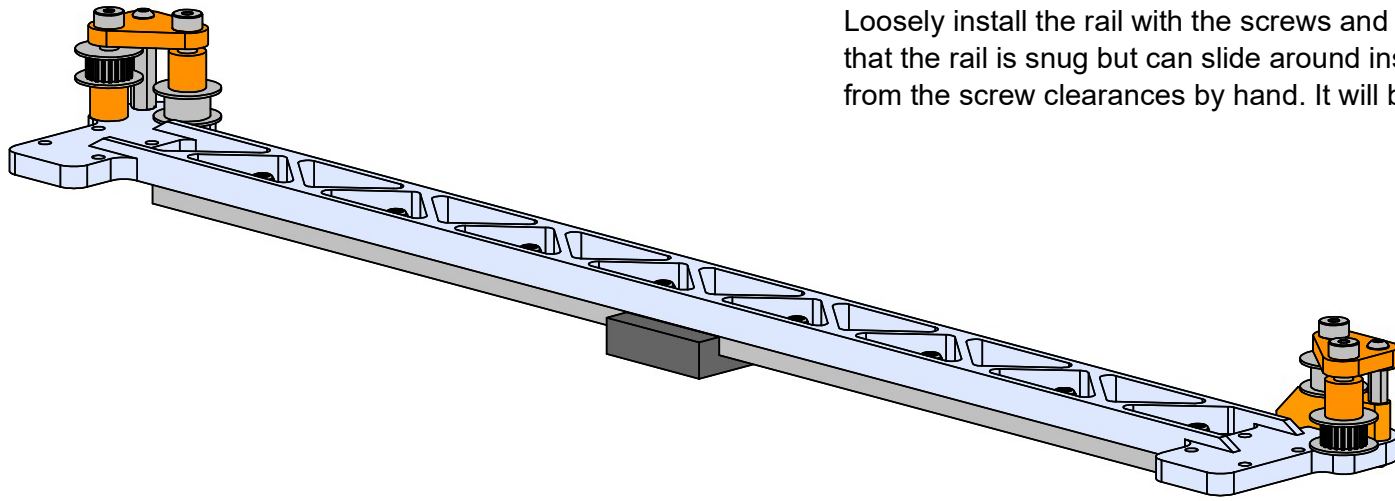
SCALE: 1:1

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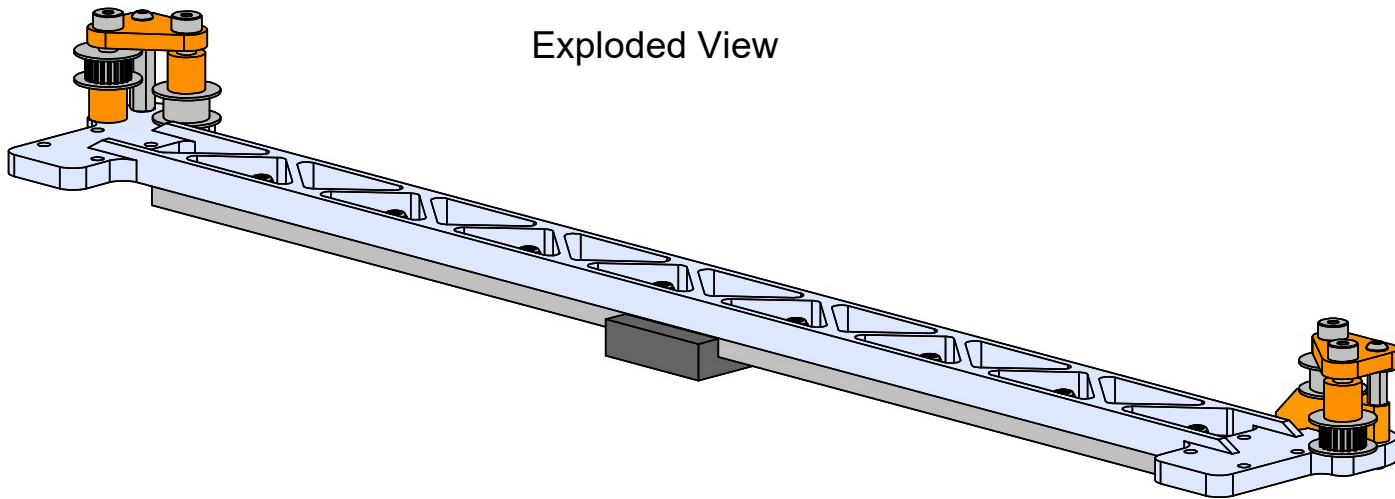
| ITEM NO. | DESCRIPTION | QTY. |
|----------|--------------------------------|------|
| 1 | Pocketed Crossbar | 1 |
| 2 | Right Crossbar Pulley Assembly | 1 |
| 4 | M3 Buttonhead Screw, 16mm long | 1 |

| Right Crossbar Pulley Installation | | |
|------------------------------------|-------------------------------|---------------------------|
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| | SCALE: 1:3 | SHEET 7 OF 8 |



Loosely install the rail with the screws and lock nuts such that the rail is snug but can slide around inside the holes from the screw clearances by hand. It will be tightened later.

Exploded View



Assembled View

| ITEM NO. | DESCRIPTION | QTY. |
|----------|--------------------------------|------|
| 4 | M3 Buttonhead Screw, 16mm long | 1 |
| 5 | M3 Buttonhead Screw, 10mm long | 17 |
| 6 | 395mm long MGN12 rail | 1 |
| 7 | M3 Locknut | 16 |
| 8 | MGN12C Carriage Block | 1 |

Rail Installation



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