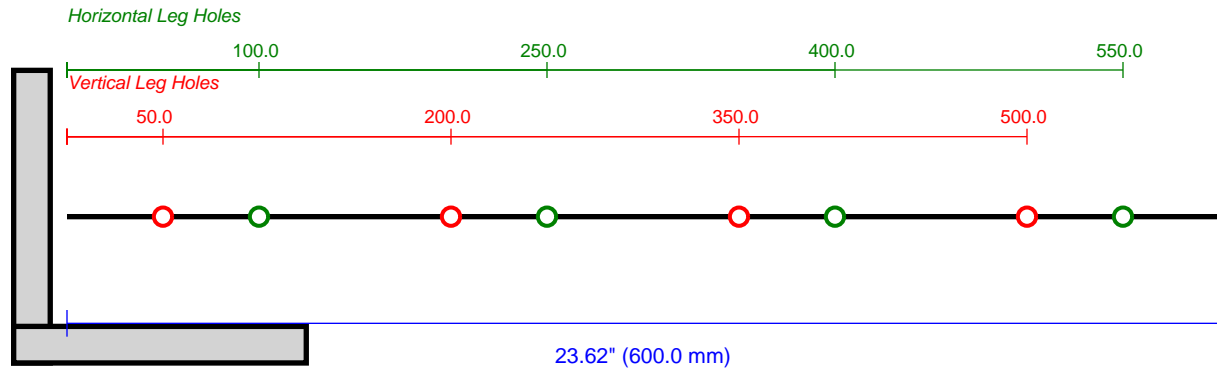


# Part A1: Back Stiffener Outer Vertical

Quantity Needed: 2

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

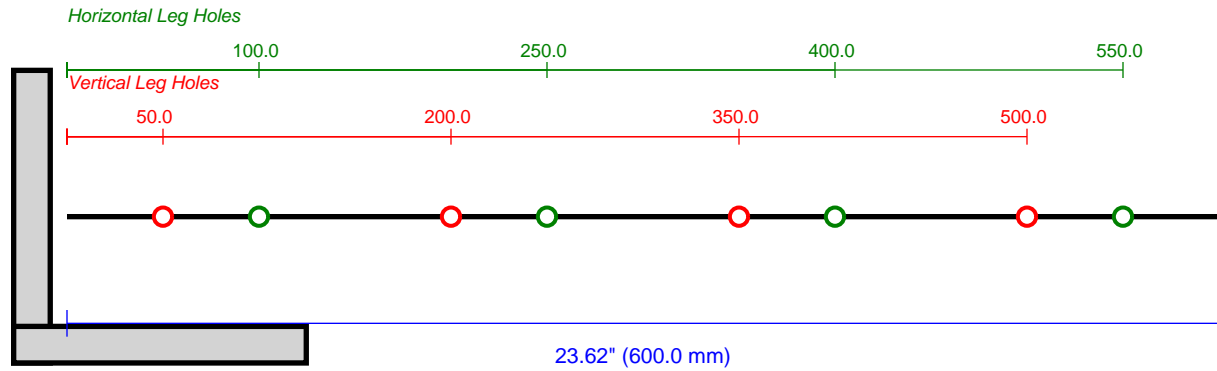
- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 23.62" (600.0 mm)
- ☐ 2. Drill 3/8" hole at 1.97" (50.0 mm)
  - Wall mounting (vertical leg)
- ☐ 3. Drill 3/8" hole at 7.87" (200.0 mm)
  - Wall mounting (vertical leg)
- ☐ 4. Drill 3/8" hole at 13.78" (350.0 mm)
  - Wall mounting (vertical leg)
- ☐ 5. Drill 3/8" hole at 19.69" (500.0 mm)
  - Wall mounting (vertical leg)
- ☐ 6. Drill 3/8" hole at 3.94" (100.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 7. Drill 3/8" hole at 9.84" (250.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 8. Drill 3/8" hole at 15.75" (400.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 9. Drill 3/8" hole at 21.65" (550.0 mm)
  - Plate mounting (horizontal leg)

# Part A2: Back Stiffener Inner Vertical

Quantity Needed: 4

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



## Manufacturing Operations:

(3D renders require OpenSCAD)

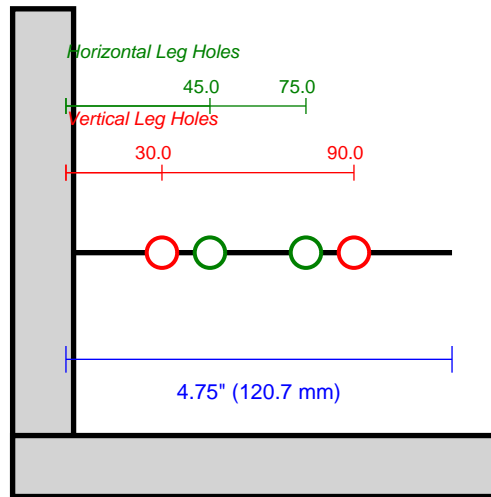
- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 23.62" (600.0 mm)
- ☐ 2. Drill 3/8" hole at 1.97" (50.0 mm)
  - Wall mounting (vertical leg)
- ☐ 3. Drill 3/8" hole at 7.87" (200.0 mm)
  - Wall mounting (vertical leg)
- ☐ 4. Drill 3/8" hole at 13.78" (350.0 mm)
  - Wall mounting (vertical leg)
- ☐ 5. Drill 3/8" hole at 19.69" (500.0 mm)
  - Wall mounting (vertical leg)
- ☐ 6. Drill 3/8" hole at 3.94" (100.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 7. Drill 3/8" hole at 9.84" (250.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 8. Drill 3/8" hole at 15.75" (400.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 9. Drill 3/8" hole at 21.65" (550.0 mm)
  - Plate mounting (horizontal leg)

# Part A3: Front Stiffener Outer Vertical

Quantity Needed: 6

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 4.75" (120.7 mm)
- ☐ 2. Drill 3/8" hole at 1.18" (30.0 mm)
  - Wall mounting (vertical leg)
- ☐ 3. Drill 3/8" hole at 3.54" (90.0 mm)
  - Wall mounting (vertical leg)
- ☐ 4. Drill 3/8" hole at 1.77" (45.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 5. Drill 3/8" hole at 2.95" (75.0 mm)
  - Plate mounting (horizontal leg)

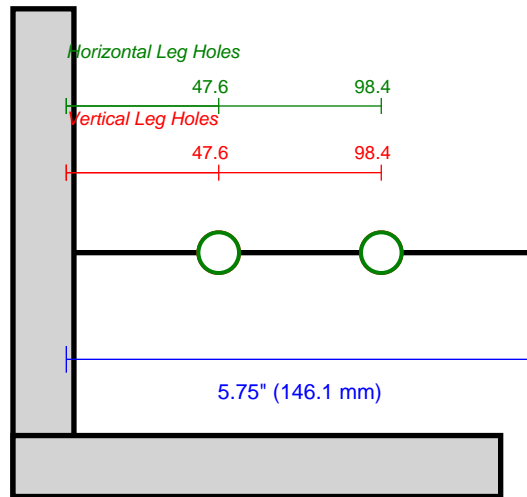
Notes: Front stiffener 5" sections. 3/8" holes, 3" spacing.

# Part A4: Frame Tube Mount Angle

Quantity Needed: 16

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 5.75" (146.1 mm)
- ☐ 2. Drill 1/2" hole at 1.88" (47.6 mm)
  - Wall mounting bolt 1 (vertical leg)
- ☐ 3. Drill 1/2" hole at 3.88" (98.4 mm)
  - Wall mounting bolt 2 (vertical leg)
- ☐ 4. Drill 1/2" hole at 1.88" (47.6 mm)
  - Tube mounting bolt 1 (horizontal leg)
- ☐ 5. Drill 1/2" hole at 3.88" (98.4 mm)
  - Tube mounting bolt 2 (horizontal leg)

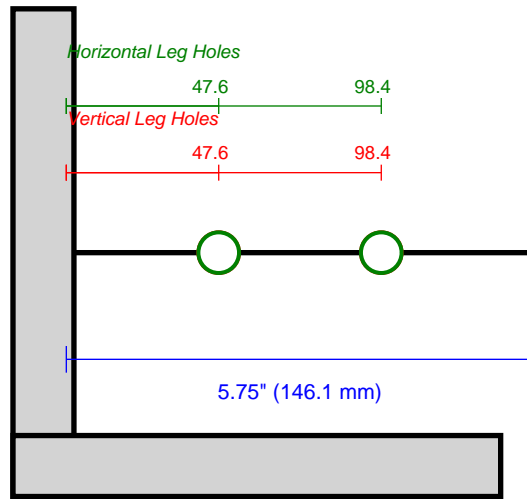
Notes: Mounts 2x6 frame tubes to panels. 1/2" holes: 4" spacing on wall leg, 2" spacing on tube leg.

# Part A5: Arm Crossbeam Mount Angle

Quantity Needed: 4

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 5.75" (146.1 mm)
- ☐ 2. Drill 1/2" hole at 1.88" (47.6 mm)
  - Plate mounting bolt 1 (vertical leg)
- ☐ 3. Drill 1/2" hole at 3.88" (98.4 mm)
  - Plate mounting bolt 2 (vertical leg)
- ☐ 4. Drill 1/2" hole at 1.88" (47.6 mm)
  - Beam mounting bolt 1 (horizontal leg)
- ☐ 5. Drill 1/2" hole at 3.88" (98.4 mm)
  - Beam mounting bolt 2 (horizontal leg)

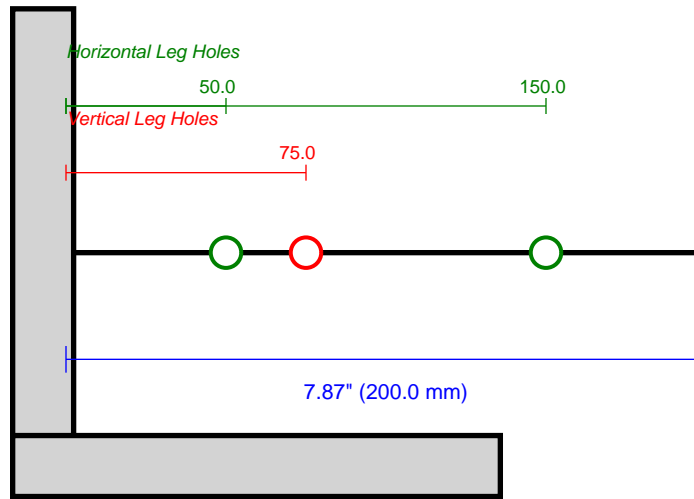
Notes: Connects loader arm crossbeam to arm plates. 2 per arm x 2 arms = 4 total.

# Part A6-1: Bottom Horizontal Segment 1 (Rear)

Quantity Needed: 8

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 7.87" (200.0 mm)
- ☐ 2. Drill 3/8" hole at 1.97" (50.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 3. Drill 3/8" hole at 5.91" (150.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 4. Drill 3/8" hole at 2.95" (75.0 mm)
  - Wall mounting (vertical leg)

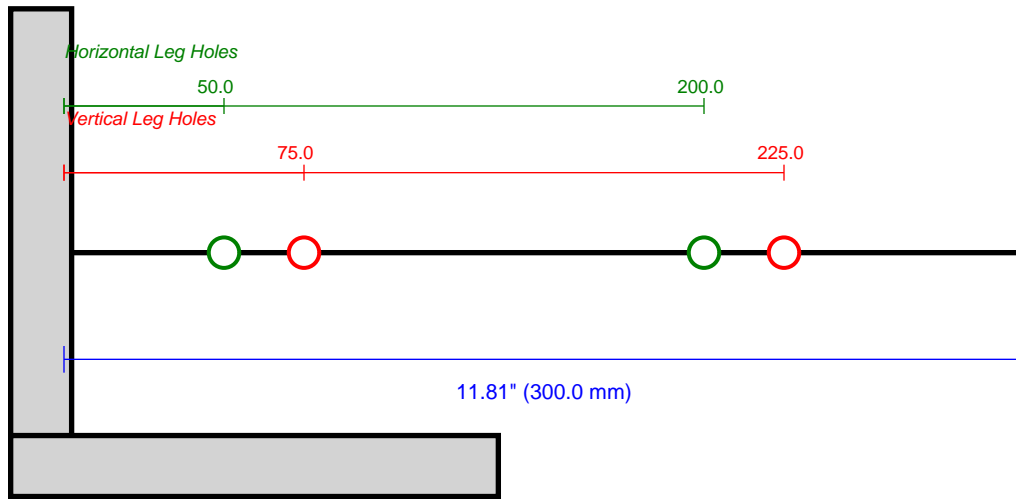
Notes: Bottom plate rear segment. Split pattern with 8" gaps at wheels.

# Part A6-2: Bottom Horizontal Segment 2 (Middle)

Quantity Needed: 8

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 11.81" (300.0 mm)
- ☐ 2. Drill 3/8" hole at 1.97" (50.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 3. Drill 3/8" hole at 7.87" (200.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 4. Drill 3/8" hole at 2.95" (75.0 mm)
  - Wall mounting (vertical leg)
- ☐ 5. Drill 3/8" hole at 8.86" (225.0 mm)
  - Wall mounting (vertical leg)

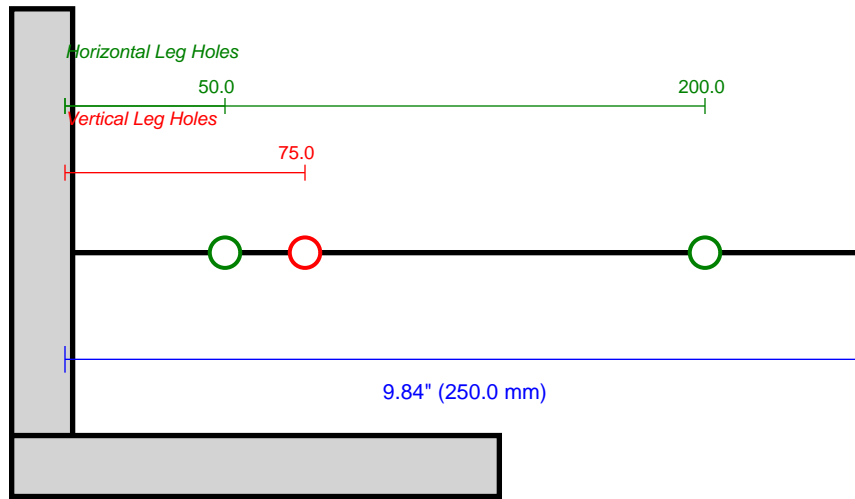
Notes: Bottom plate middle segment (between wheels).

# Part A6-3: Bottom Horizontal Segment 3 (Front)

Quantity Needed: 8

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 9.84" (250.0 mm)
- ☐ 2. Drill 3/8" hole at 1.97" (50.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 3. Drill 3/8" hole at 7.87" (200.0 mm)
  - Plate mounting (horizontal leg)
- ☐ 4. Drill 3/8" hole at 2.95" (75.0 mm)
  - Wall mounting (vertical leg)

Notes: Bottom plate front segment.

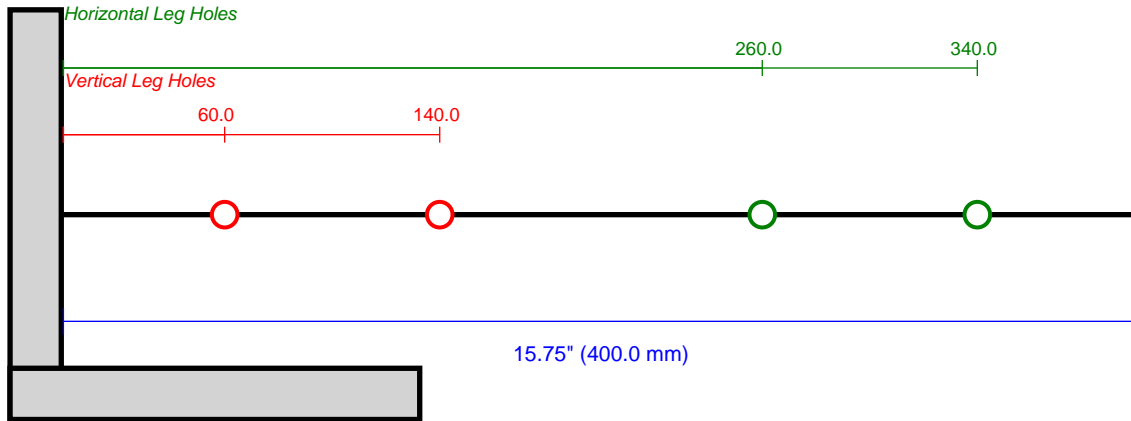


# Part A7: Platform Side Angle

Quantity Needed: 2

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 15.75" (400.0 mm)
- ☐ 2. Drill 3/8" hole at 2.36" (60.0 mm)
  - Pivot bracket bolt 1 (vertical leg)
- ☐ 3. Drill 3/8" hole at 5.51" (140.0 mm)
  - Pivot bracket bolt 2 (vertical leg)
- ☐ 4. Drill 3/8" hole at 10.24" (260.0 mm)
  - Deck bolt 1 (horizontal leg)
- ☐ 5. Drill 3/8" hole at 13.39" (340.0 mm)
  - Deck bolt 2 (horizontal leg)

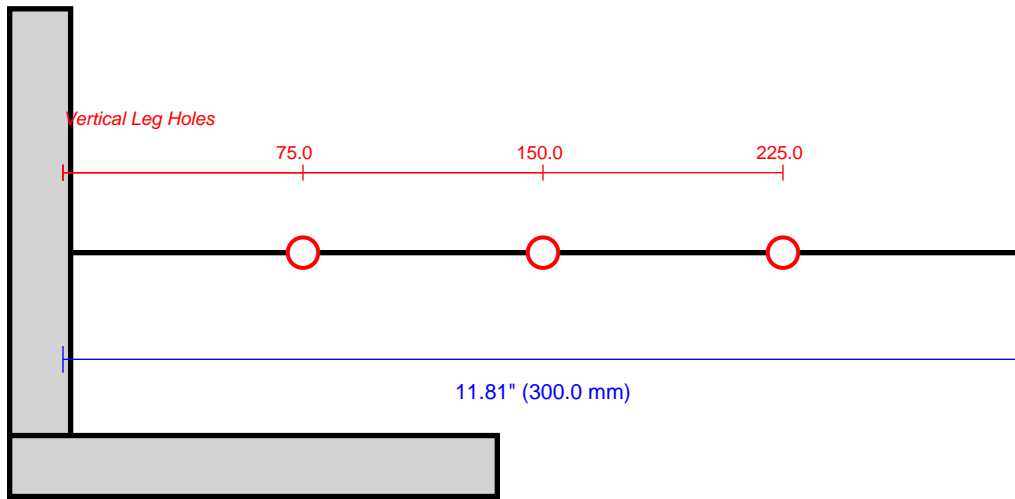
Notes: Standing platform side arms. Make one left and one right (mirror image).

# Part A8: Platform Transverse Angle

Quantity Needed: 2

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 11.81" (300.0 mm)
- ☐ 2. Drill 3/8" hole at 2.95" (75.0 mm)
  - Deck mounting hole
- ☐ 3. Drill 3/8" hole at 5.91" (150.0 mm)
  - Deck mounting hole
- ☐ 4. Drill 3/8" hole at 8.86" (225.0 mm)
  - Deck mounting hole

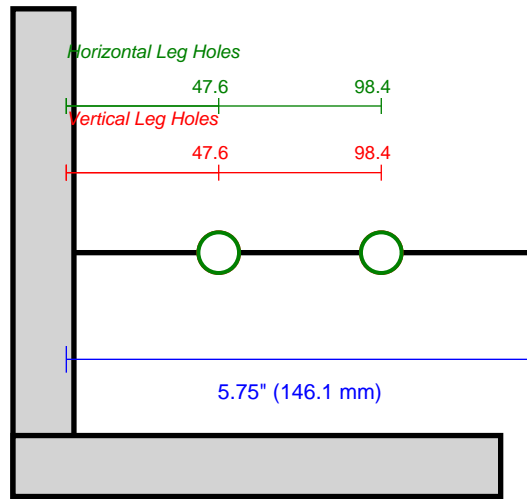
*Notes: Platform transverse bracing (left-right across deck).*

# Part A9: Front Center Angle

Quantity Needed: 2

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 5.75" (146.1 mm)
- ☐ 2. Drill 1/2" hole at 1.88" (47.6 mm)
  - Mounting bolt 1 (vertical leg)
- ☐ 3. Drill 1/2" hole at 3.88" (98.4 mm)
  - Mounting bolt 2 (vertical leg)
- ☐ 4. Drill 1/2" hole at 1.88" (47.6 mm)
  - Mounting bolt 1 (horizontal leg)
- ☐ 5. Drill 1/2" hole at 3.88" (98.4 mm)
  - Mounting bolt 2 (horizontal leg)

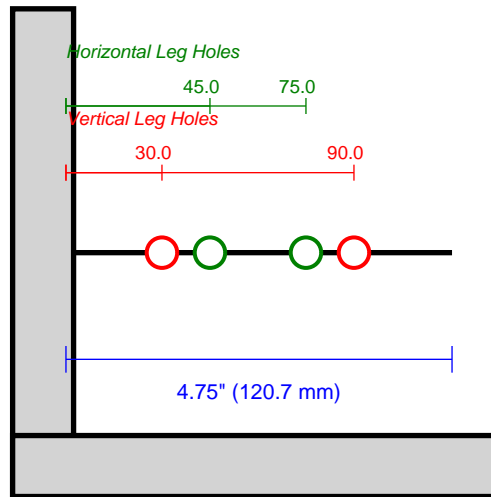
*Notes: Front stiffener motor plate inner faces. Same as A4.*

# Part A10: Front Outer Angle (Motor Plate)

Quantity Needed: 8

Material: 2" x 2" x 1/4" Angle Iron

Material: 2" x 2" x 1/4" Angle Iron



(3D renders require OpenSCAD)

## Manufacturing Operations:

- ☐ 1. Cut 2" x 2" x 1/4" Angle Iron to 4.75" (120.7 mm)
- ☐ 2. Drill 3/8" hole at 1.18" (30.0 mm)
  - Mounting hole 1 (vertical leg)
- ☐ 3. Drill 3/8" hole at 3.54" (90.0 mm)
  - Mounting hole 2 (vertical leg)
- ☐ 4. Drill 3/8" hole at 1.77" (45.0 mm)
  - Mounting hole 1 (horizontal leg)
- ☐ 5. Drill 3/8" hole at 2.95" (75.0 mm)
  - Mounting hole 2 (horizontal leg)

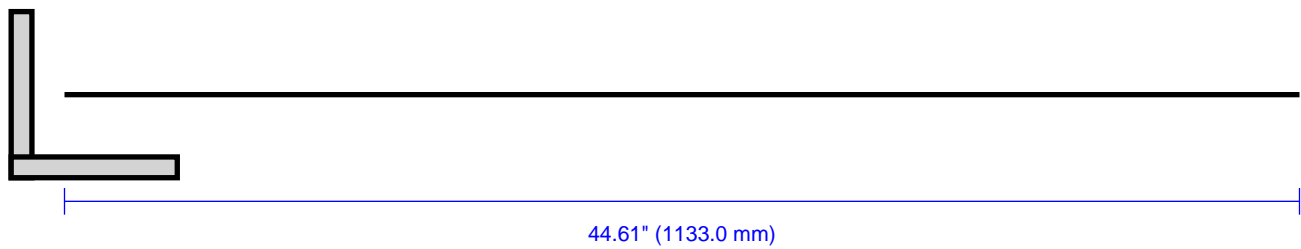
Notes: Front stiffener outer sections and motor plate sides.

# Part T1: Front Frame Tube

Quantity Needed: 1Material: 2" x 6" x 1/4" Rectangular Tubing

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Material: 2" x 6" x 1/4" Rectangular Tubing



Manufacturing Operations:

(3D renders require OpenSCAD)

- ☐ 1. Cut 2" x 6" x 1/4" Rectangular Tubing to 44.61" (1133.0 mm)

Notes: Front cross frame tube. Length = TRACK\_WIDTH + SANDWICH\_SPACING + 2xPANEL\_THICKNESS + extensions.

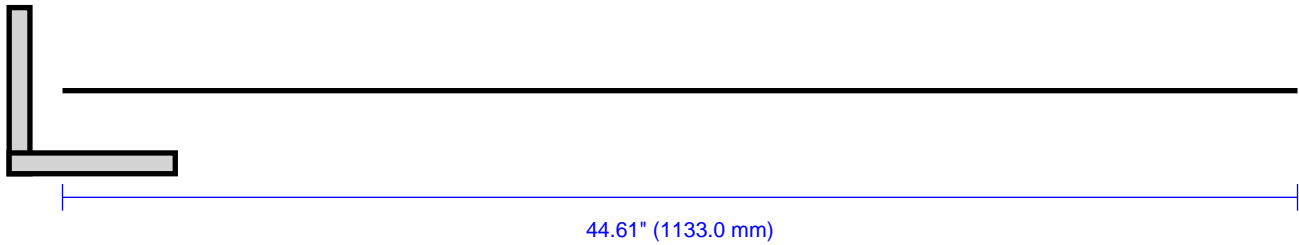
# Part T2: Rear Frame Tube

Quantity Needed: 1

Material: 2" x 6" x 1/4" Rectangular Tubing

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Material: 2" x 6" x 1/4" Rectangular Tubing



## Manufacturing Operations:

*(3D renders require OpenSCAD)*

- ☐ 1. Cut 2" x 6" x 1/4" Rectangular Tubing to 44.61" (1133.0 mm)

*Notes: Rear cross frame tube. Same length as T1.*

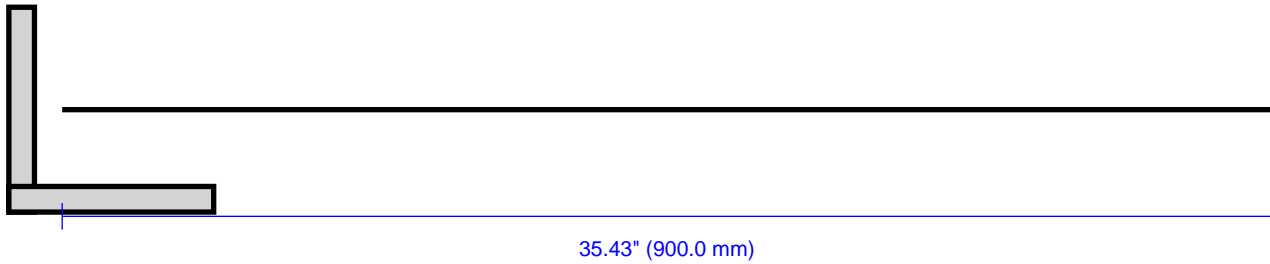
# Part T3: Arm Crossbeam

Quantity Needed: 1

Material: 2" x 6" x 1/4" Rectangular Tubing

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Material: 2" x 6" x 1/4" Rectangular Tubing



## Manufacturing Operations:

(3D renders require OpenSCAD)

- ☐ 1. Cut 2" x 6" x 1/4" Rectangular Tubing to 35.43" (900.0 mm)

*Notes: Loader arm crossbeam connecting left and right arms. Length = ARM\_SPACING.*

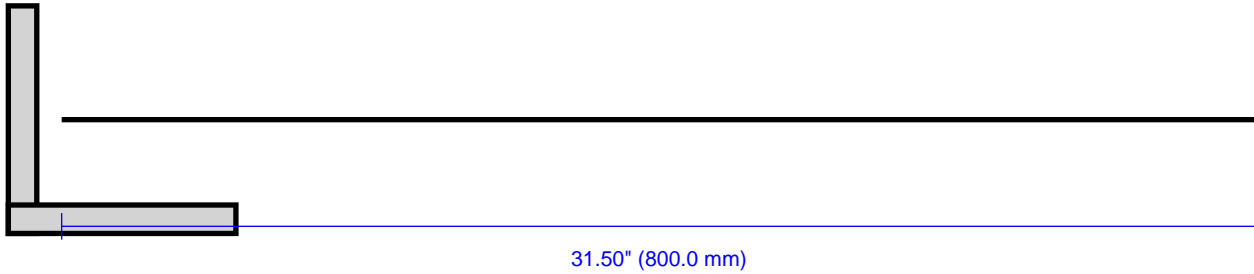
# Part T4: Main Arm Tube

Quantity Needed: 2

Material: 2" x 6" x 1/4" Rectangular Tubing

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Material: 2" x 6" x 1/4" Rectangular Tubing



## Manufacturing Operations:

*(3D renders require OpenSCAD)*

- ☐ 1. Cut 2" x 6" x 1/4" Rectangular Tubing to 31.50" (800.0 mm)

*Notes: Loader arm main sections (pivot to elbow). One per arm.*



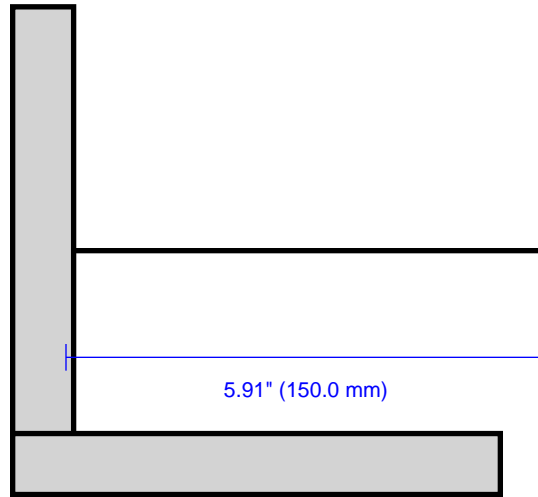
# Part T5: Arm Leg Spacer Tube

Quantity Needed: 2

Material: 2" x 6" x 1/4" Rectangular Tubing

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Material: 2" x 6" x 1/4" Rectangular Tubing



## Manufacturing Operations:

*(3D renders require OpenSCAD)*

- ☐ 1. Cut 2" x 6" x 1/4" Rectangular Tubing to 5.91" (150.0 mm)

*Notes: Spacer tubes at loader arm elbows. Plasma cut to tapered profile.*