

Ninja 250 Luggage Rack
Design by N4MWD

Parts Needed from AircraftSpruce.com:

Raw Materials	Alloy	Length	Quantity	Aircraft Spruce #
1/4" x 1" Flat Bar	2024*	3.0 Feet	2	03-43400-3
1/8" x 1" Angle	2024*	2.0 Feet	1	03-47300-2
1/16" x 3/4" Angle	2024*	1.0 Foot	1	03-47000-1
1/8" x 2" Flat Bar	2024*	2.0 Feet	1	03-42900-2
1/8" x 1.5" Flat Bar	2024*	3.0 Feet	1	03-42800-3
0.071" x 1.0 Flat Bar	4130**	3.0 Feet	1	03-19200-3
1/2" OD x 0.260" ID Tubing	6061-T6	1.0 Foot	1	03-35975-1
Solid Hard Rivet	2117	3/4 Inch	1/8 lb	AN470AD-4-12
Solid Hard Rivet	2117	9/16 Inch	1/8 lb	AN470AD-4-9

*2024 = 2024-T351 Aluminum

**4130 = 4130 Chromoly Steel - Ok to substitute mild steel

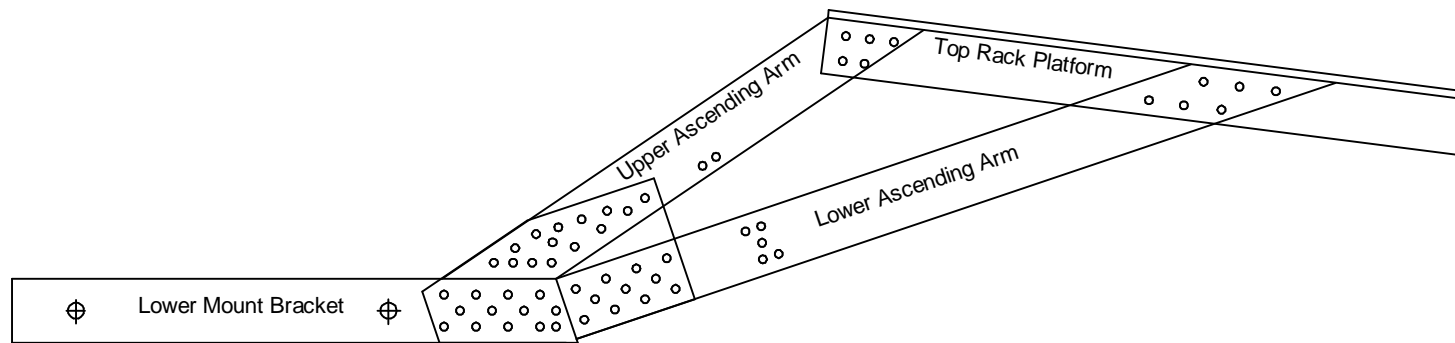
Miscellaneous Hardware:

Part	Diameter	Thread	Length	Qty	Notes
Bolt	6mm	1.0	12mm	2	Grab Bar Brackets
Bolt	6mm	1.0	55mm	4	Luggage Hook Mounts
Bolt	8/32	8/32	0.75"	12	Top Plate Mounting Bolts
Washer	6mm			6	Use on all 6mm bolts
Washer	8/32			12	Use on all 8/32 bolts
Stop Nut	8/32	8/32		12	Optional: Use as safety nut

Required Tools:

Hammer, metal cutting saw, drill bits (1/8", 1/4", and 3/16"), grinder with wire brush, C-clamps, cleco set, cleco pliers, caliper, measuring tape, center punch, 8/32 tap, drill, scotch tape, air compressor, air riveting hammer, riveting hammer bits, vice, 10mm socket and wrench, 10mm open end wrench, and a phillips screwdriver.

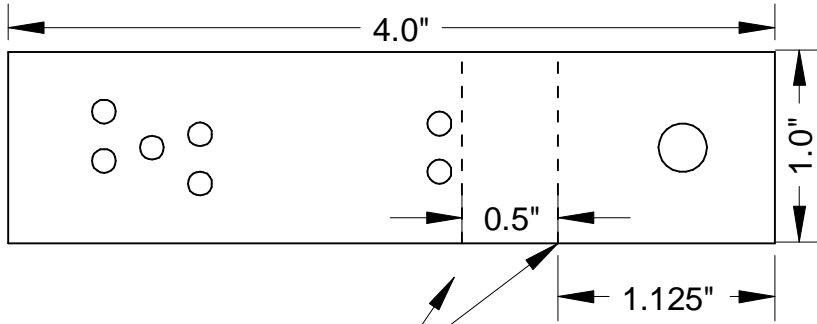
Ninja 250 Luggage Rack



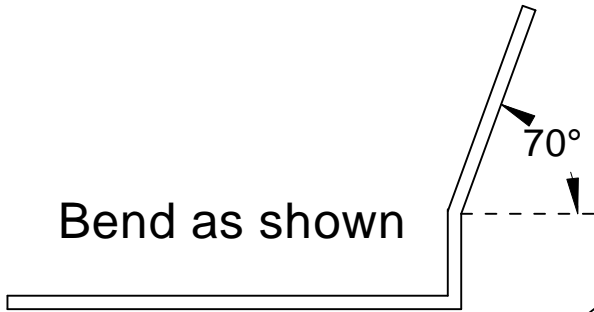
1/3 scale

Designed by N4MWD

Grab Bar Attachment Bracket 0.071" or 0.065" Steel

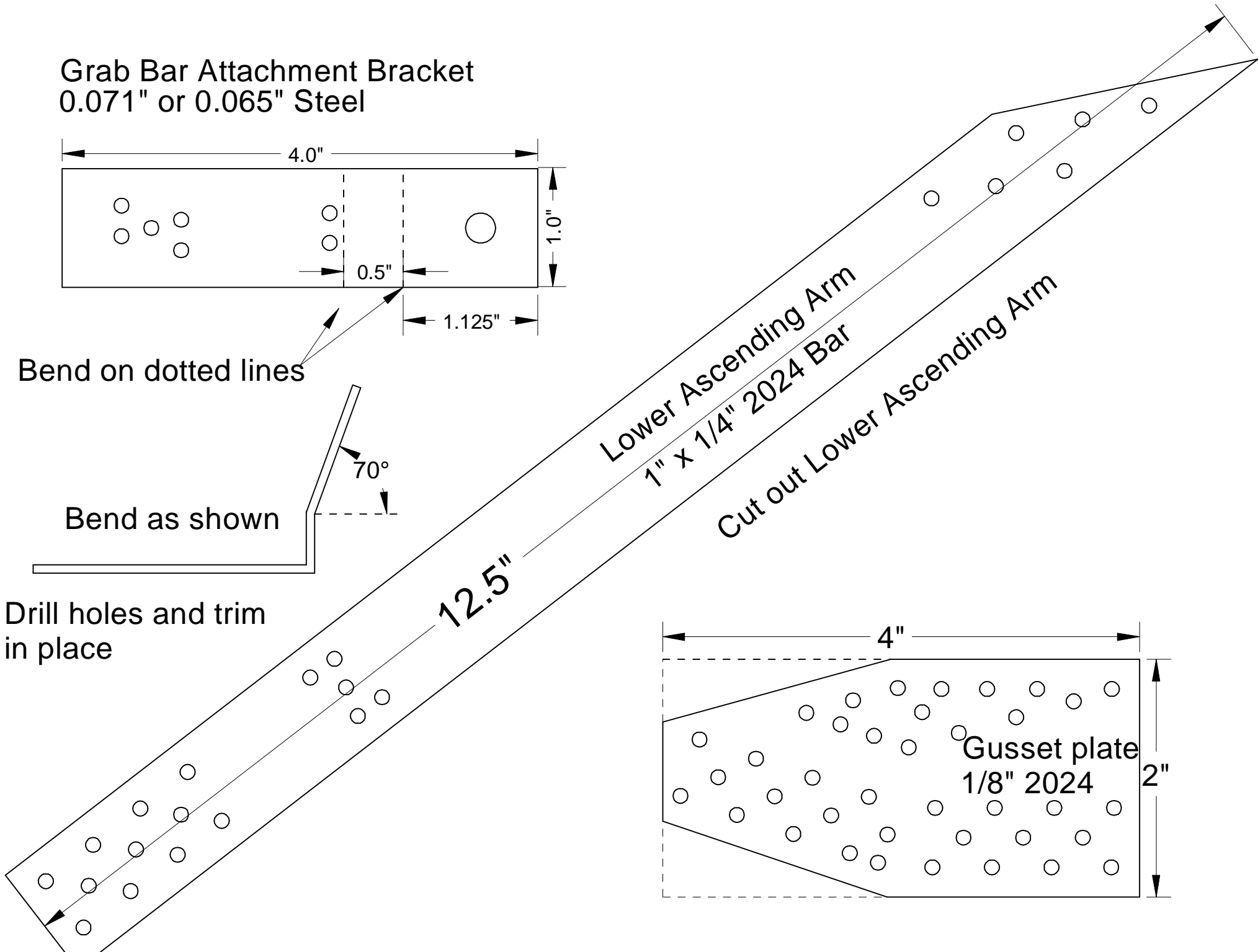


Bend on dotted lines

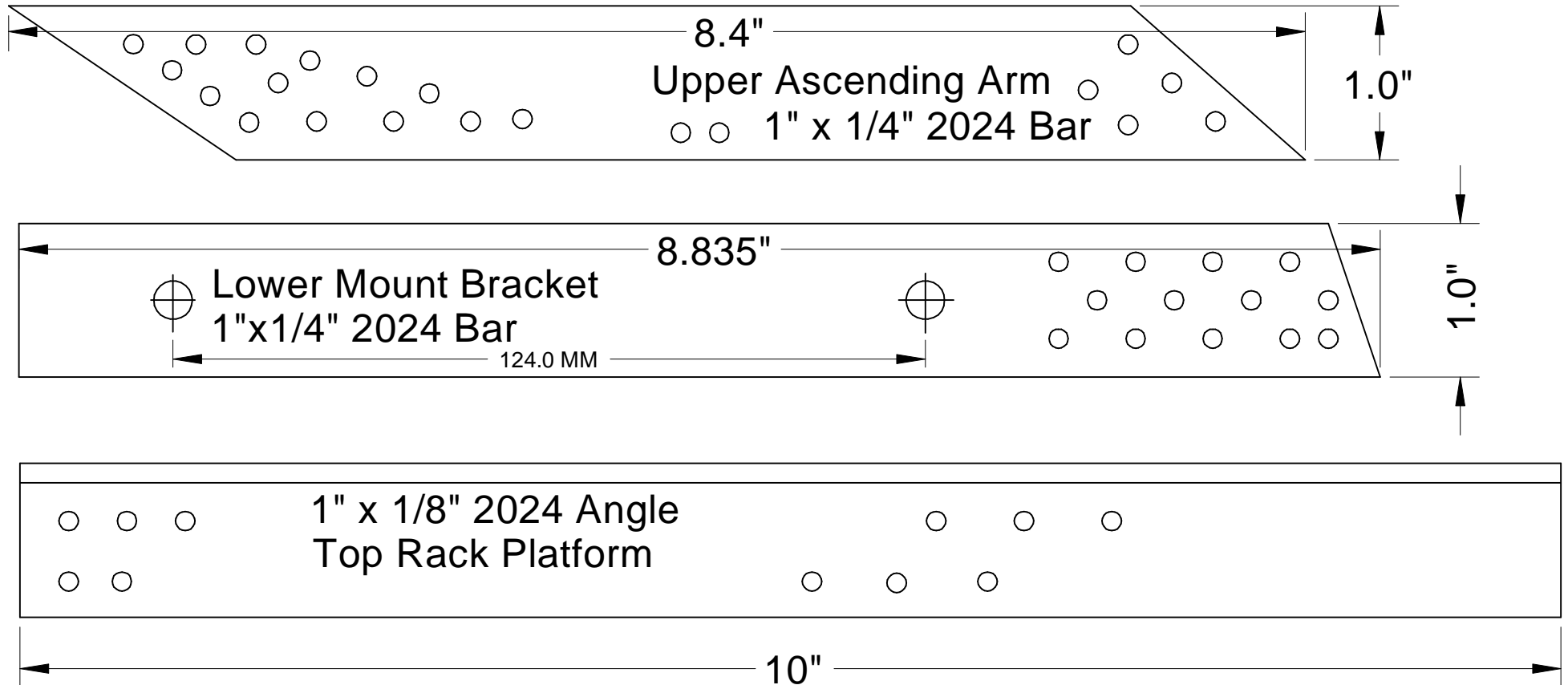


Bend as shown

Drill holes and trim
in place



Print this page and cut out parts.



Cut the Upper Ascending Arm and the Lower Mount Bracket.
Cut as described in the video.
Verify printer scale by measuring each part.
These parts should print to the exact size.