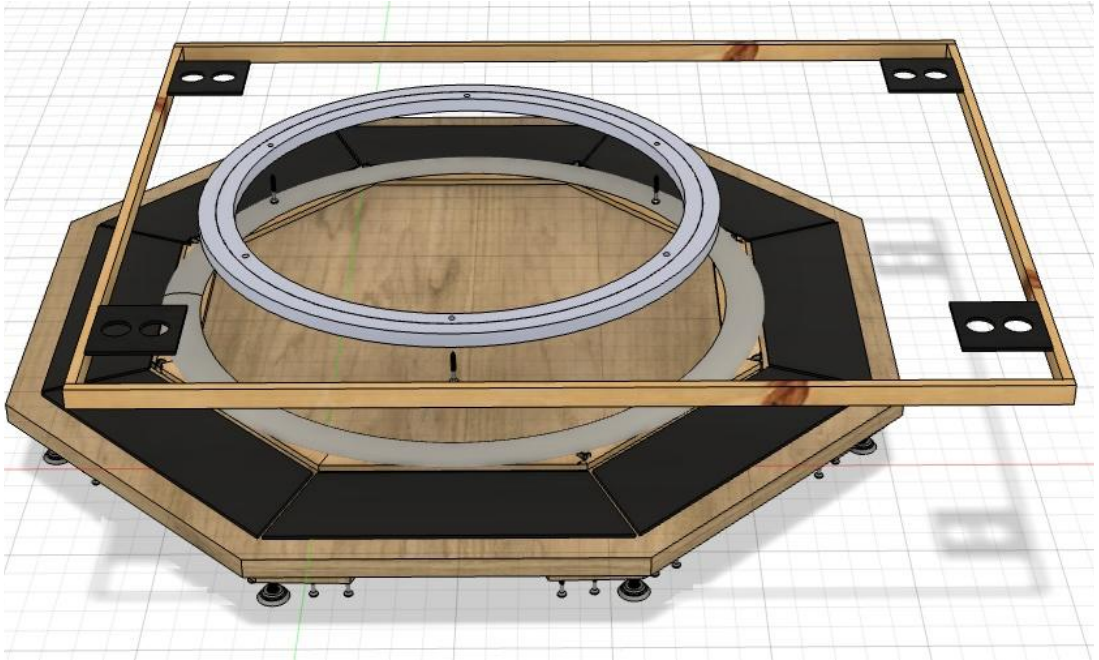
Bino-Chair Component Plans:
Rotating Base and Drive Wheel Mount for Azimuth Control



MWL-2500 v1

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Getting started

Welcome to these very popular components for bino-chair slewing! They evolved from an award winning prototype. They are guaranteed to be rewarding to build, especially when seeing how they smoothly rotate your chair, with stability. It's really amazing what a little wood and hardware can do! These plans are in two sections, one for the rotating base and one for the drive wheel mount on the side of the chair. The primary purpose of these plans is superior functionality and user comfort, while aesthetics is only a secondary concern.

This 1-minute video shows the rotating base and drive wheel mount being set up quickly: milkywaylounge.com/?p=549

Important short video introductions to the mechanics:
Rotating base: milkywaylounge.com/?p=734
Drive wheel mount: milkywaylounge.com/?p=682

"Must read" chair selection post: milkywaylounge.com/?p=641
A chair is needed for building and testing these components. The plans are intended to be adaptable to a range of typical chair geometries. Some customization can be employed for very different chair styles and sizes. However, one can save time and uncertainty and achieve better results by using a standard zero gravity chair. Without one, functionality will be limited, and some design aspects would need to be altered. Using an old chair that you happen to have lying around is unlikely to work out satisfactorily, and may be unsafe.

Please expect a little trial and error as you build, because you're fitting to your chair's geometry. You will surely see that the results are well worth the extra bit of effort. This project is unique in many ways.

The drive wheel mount will have moderate adjustability to fit the shape and size of a range of typical chair frames. It also self-adjusts so that the wheel sits at the right height to engage properly with the ground track.

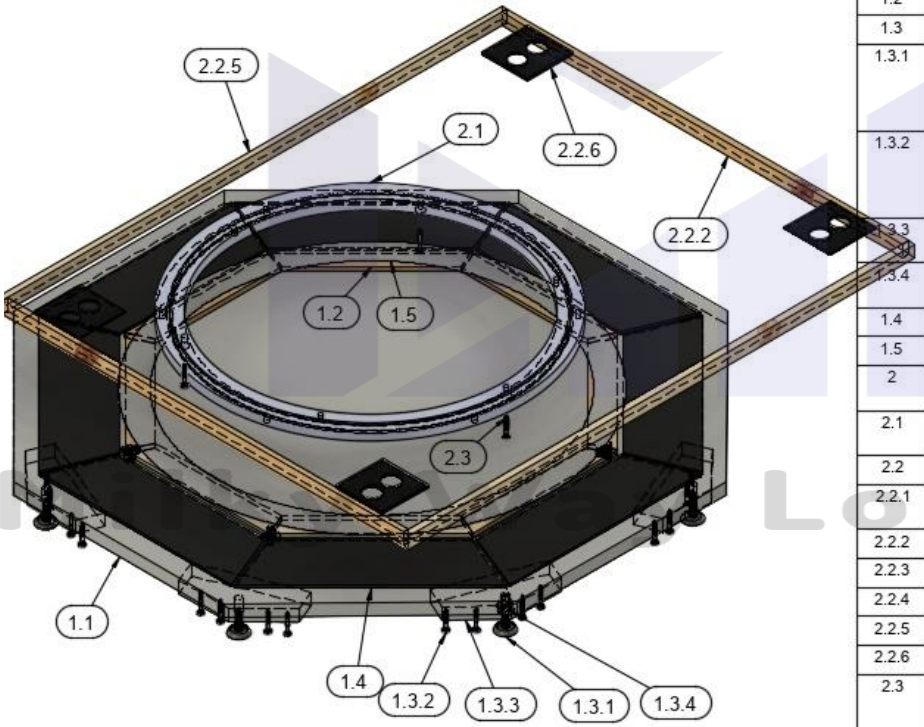
Safety is more important than anything else in this project. Never perform a construction step unless you have full confidence that it can be done safely. Workpieces must be held down or guided. Cutting equipment must be understood. Get help where unsure. Have someone available just in case.

These plans are concise, containing only relevant information, so it's advisable not to skip over sections. Please publish your review under the main site's Reviews tab, or send an email with constructive criticism. Have fun building!

Technical support: contact@milkywaylounge.com

Parts list drawing: rotating base

The turntable bearing is attached to the bottom of the chair platform, and will sit in the friction cavity of the ground board. The platform is shown mostly transparent. Some of the numbered components in the table are not designated in the drawing below.



MWL2502 AZIMUTH CONTROL - ROTATING BASE		
ITEM	PART NAME	MATERIAL
1	GROUND BOARD ASSEMBLY	
1.1	GROUND BOARD	PLYWOOD, FINISH
1.2	CAVITY BLOCK (8)	PINE
1.3	FOOT (8)	
1.3.1	5/16" STAINLESS 1 X 1-1/2" LEVELER (8) WITH THREADED INSERT (8)	STEEL
1.3.2	#6 X 1-1/4" COARSE THREAD STAINLESS CONE-HEAD SCREW (16)	STEEL
1.3.3	FOOT BLOCK (8)	PLYWOOD, FINISH
1.3.4	90975A316_STEEL TEE NUT INSERTS	STEEL
1.4	TRACK SEGMENT (8)	RUBBER
1.5	RING	CARPET
2	CHAIR BOARD WITH BEARING	
2.1	20" X 14MM TURNTABLE BEARING	ALUMINUM
2.2	CHAIR BOARD	
2.2.1	PLATFORM	PLYWOOD, FINISH
2.2.2	FRONT TRIM	PINE
2.2.3	BACK TRIM	PINE
2.2.4	RIGHT TRIM	PINE
2.2.5	LEFT TRIM	PINE
2.2.6	POSITIONER (4)	RUBBER
2.3	#6 X 1-1/4" COARSE THREAD STAINLESS CONE-HEAD SCREW (3)	STEEL