

# AN EXPANDABLE CNC REVOLVE CASTER ASSEMBLY

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BY CHYNNA BRADFORD

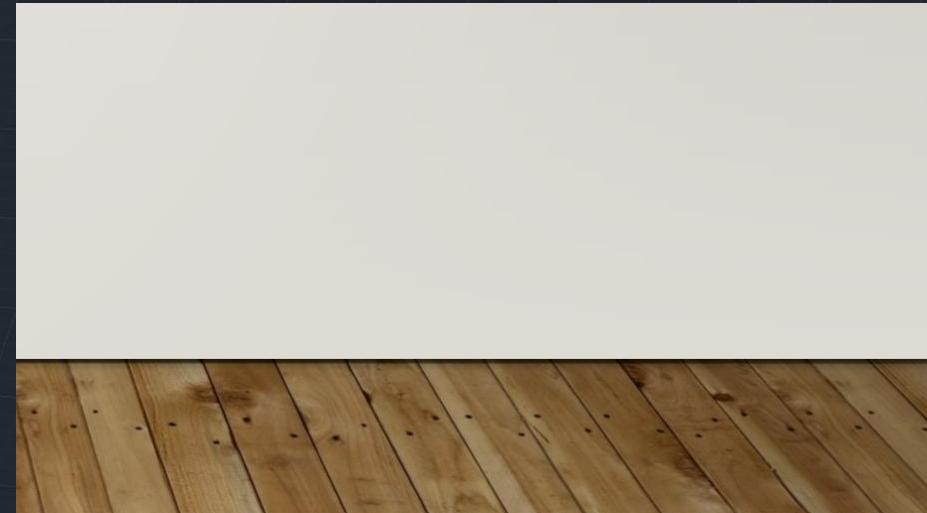
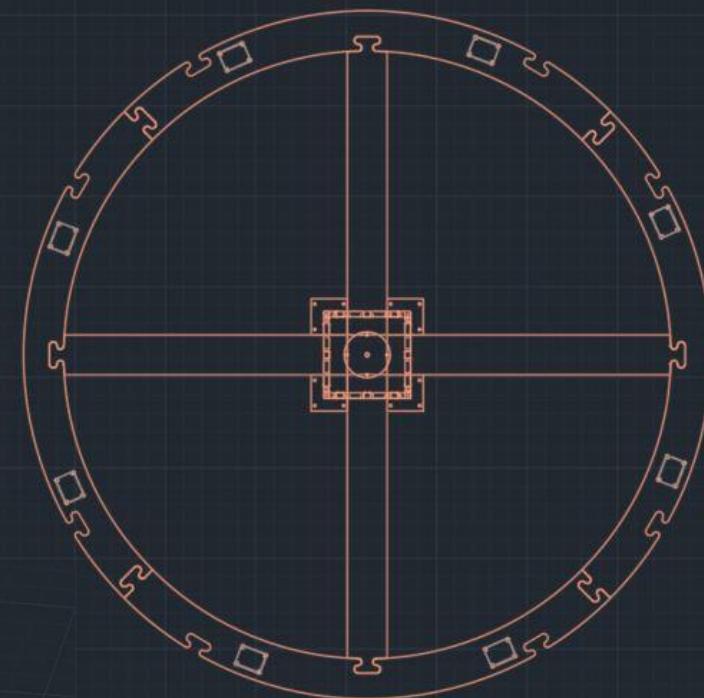
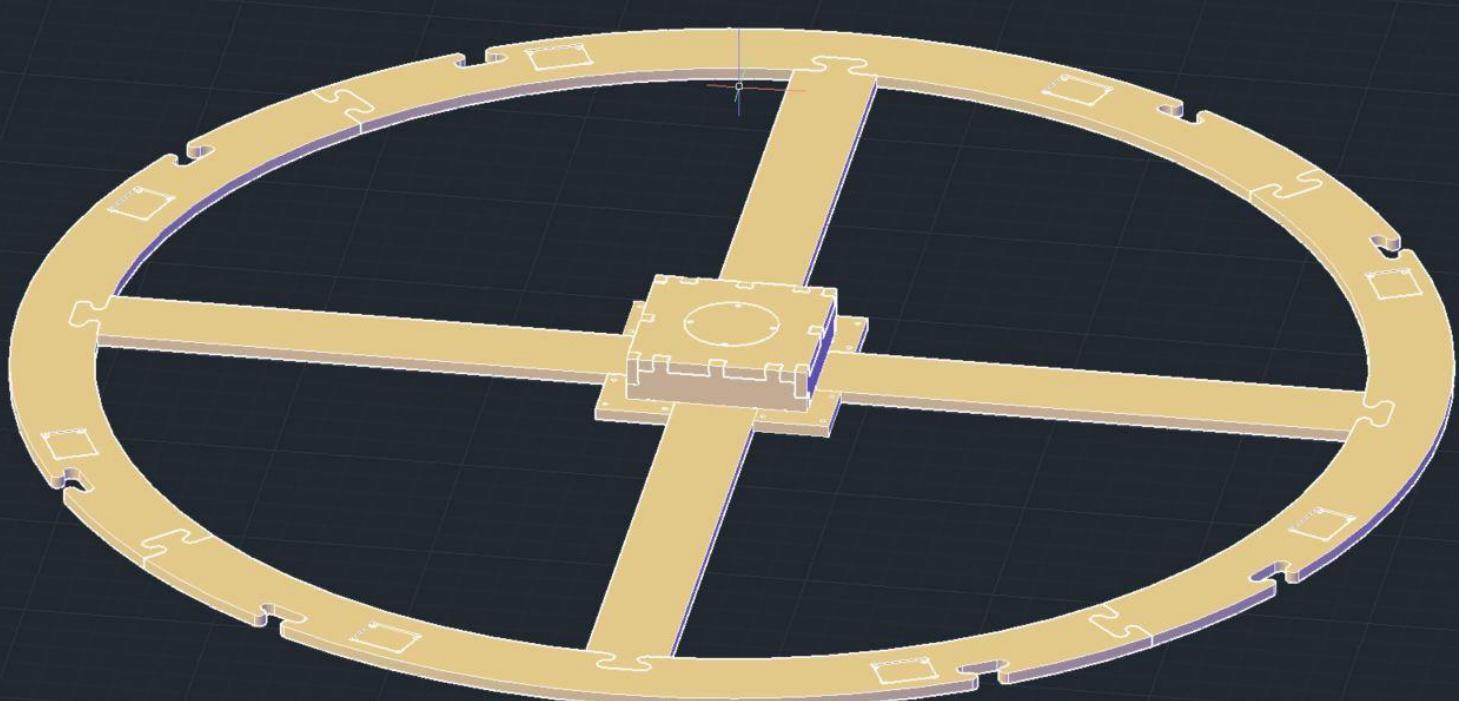


# DRAFTING PROCESS

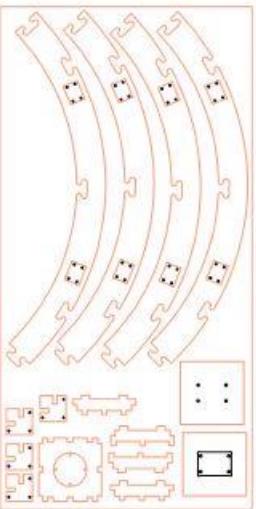
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# 3D MODELING

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LUCKY STIFF



304 REVOLVE CNC PIECES SHEET 1

NOTES:  
CUT ONE  
BITS SPECIFIED ON CNC FILE  
LK5304-1.MMG

304 REVOLVE CNC PIECES SHEET 2

NOTES:  
CUT ONE  
BITS SPECIFIED ON CNC FILE  
LK5304-2.MMG

304 REVOLVE CNC PIECES SHEET 3

NOTES:  
CUT ONE  
BITS SPECIFIED ON CNC FILE  
LK5304-3.MMG

304 REVOLVE CNC PIECES SHEET 3

NOTES:  
CUT TWO  
BITS SPECIFIED ON CNC FILE  
LK5304-4.MMG

**300-REVOLVE**  
REVOLVE CNC PIECES

DET. MATTHEW WILLIAMS

DES. GENNIE NEUMAN-LAMBERT

TR. CHYNA BRADFORD

CD. 871 U.S.

DATE 1

DATE 2

DATE 3

BUILD TIME

SW / - OF CAVES

TIME

MATERIALS USED

MATERIAL

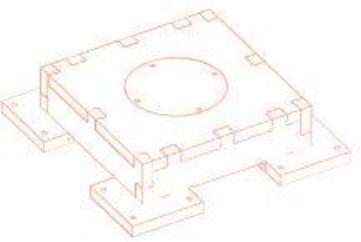
QUANTITY

SCALE AS NOTED

PLATE

304

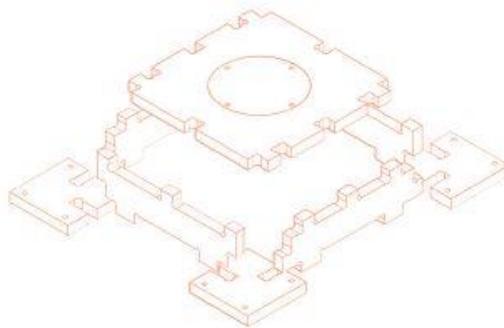
LUCKY STIFF



305 1 REVOLVE PIVOT BOX ASSEMBLED VIEW

NOTES:  
GLUE AND STAPLE  
PIECES CUT ON CNC  
PIVOT BOLTED ONTO TOP PLATE WITH 1/4" BOLTS

SCALE: 1-1/2"=1'-0"



305 2 REVOLVE PIVOT BOX EXPLODED VIEW

NOTES:  
GLUE AND STAPLE  
PIECES CUT ON CNC

SCALE: 1-1/2"=1'-0"

300-REVOLVE

PIVOT BOX ASSEMBLY

DESIGNER: MATTHEW WILLIAMS

ENGINEER: DENNIE NEUMAN-LAMBERT

TECHNICIAN: CHINNA BRADFORD

DATE 1: 08/27/15

DATE 2: 08/27/15

DATE 3: 08/27/15

BUILD TIME: 00:00:00

DAY / # OF DAYS: 1

TIME: 00:00:00

MATERIALS USED

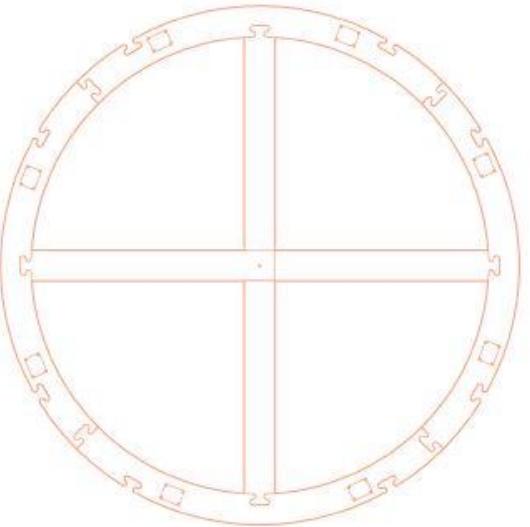
MATERIAL QUANTITY

SCALE: AS NOTED

PLATE:

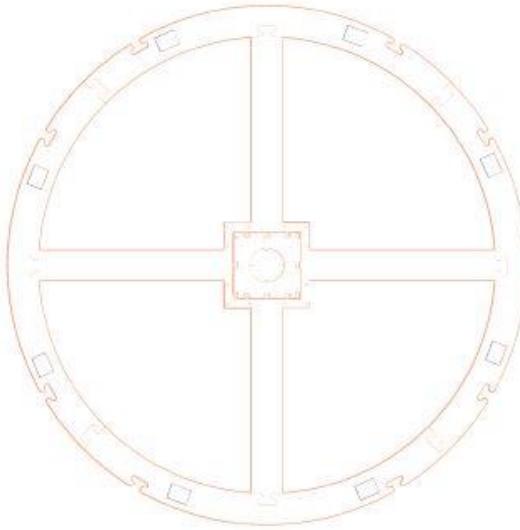
305

LUCKY STIFF

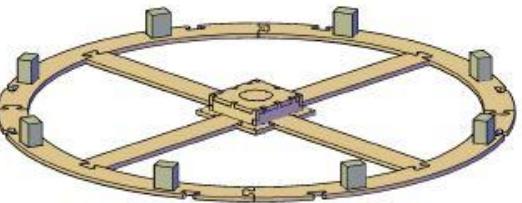


306 1 TOP VIEW: REVOLVE CASTER BASE ASSEMBLY  
NOTES: SCALE: 1/2"-1'-0"

PIECES CUT OUT ON CNC  
CENTER SPREADERS GLUED AND STAPLED TOGETHER  
CASTER PLATES SHOULD BE SHIMMED AND LEVELED IN SPACE  
CASTERS THEN PLACED IN POCKETS  
LAG THROUGH CASTERS AND PLATES INTO FLOOR



306 2 TOP VIEW: CASTER BASE ASSEMBLY WITH PIVOT BOX  
NOTES: SCALE: 1/2"-1'-0"  
LAG PIVOT BOX FEET INTO FLOOR ONCE IN PLACE

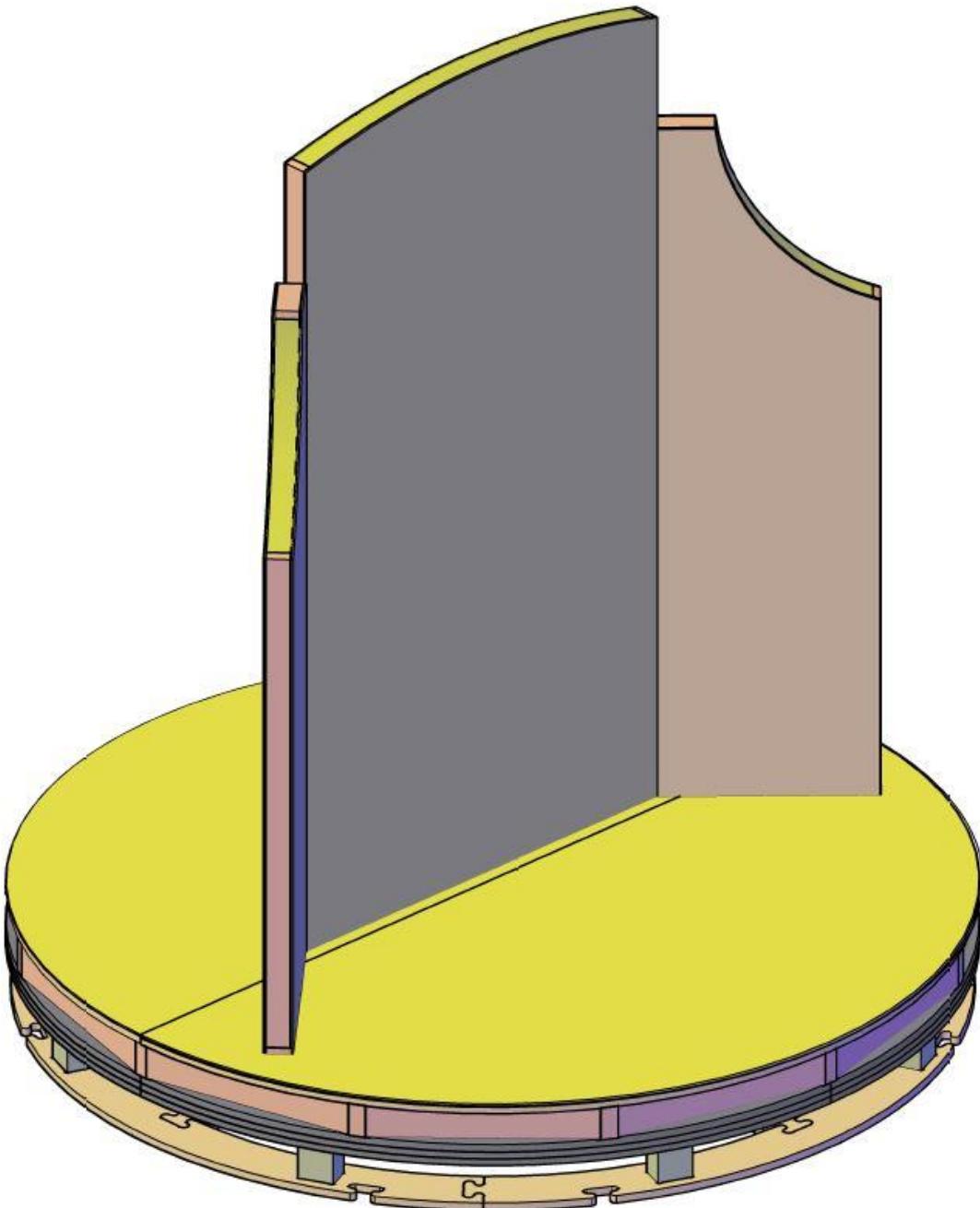


306 3 ISO VIEW: CASTER BASE ASSEMBLY WITH PIVOT BOX  
NOTES: SCALE: 1/2"-1'-0"  
LAG PIVOT BOX FEET INTO FLOOR ONCE IN PLACE

300-REVOLVE	
CASTER BASE ASSEMBLY	
F/T: MATTHEW WILLIAMS	
E/F: GENNIE NEUMAN-LANDER	
TE: CHYNA BRADFORD	ST: LKS
OB: 1	ST: 1000
DATE 1:	RE: 0000
OB: 2	ST: 1000
DATE 2:	RE: 0000
DATE 3:	
BUILD TIME	
DAY /	OF DAYS
TIME	
MATERIALS USED	
IMPROV	QUANTITY
SCALE: AS NOTED	
DATE:	

306

LUCKY STIFF



300-REVOLVE

REVOLVE OVERVIEW

RET = MATTHEW WILLIAMS

REV = GENNIE NEUMAN-LAMBERT

TECH = CHYNNA BRADFORD

OB = ST 1 LKS

DATE 1 = 10/10/2014

DATE 2 = 10/10/2014 DATE 3 = 10/10/2014

BUILD TIME

DAY / # OF CHAMPS TIME

IN REALITY

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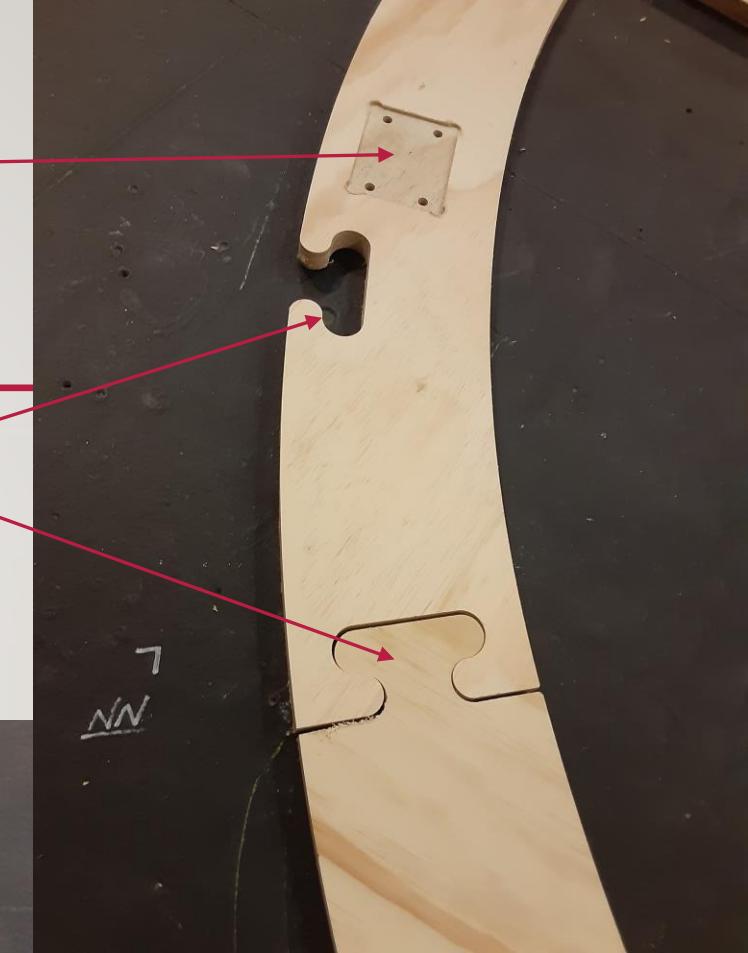
# CASTER ASSEMBLY DETAILS

Pocket Cuts and Predrilled holes for Caster Layout and Attachment

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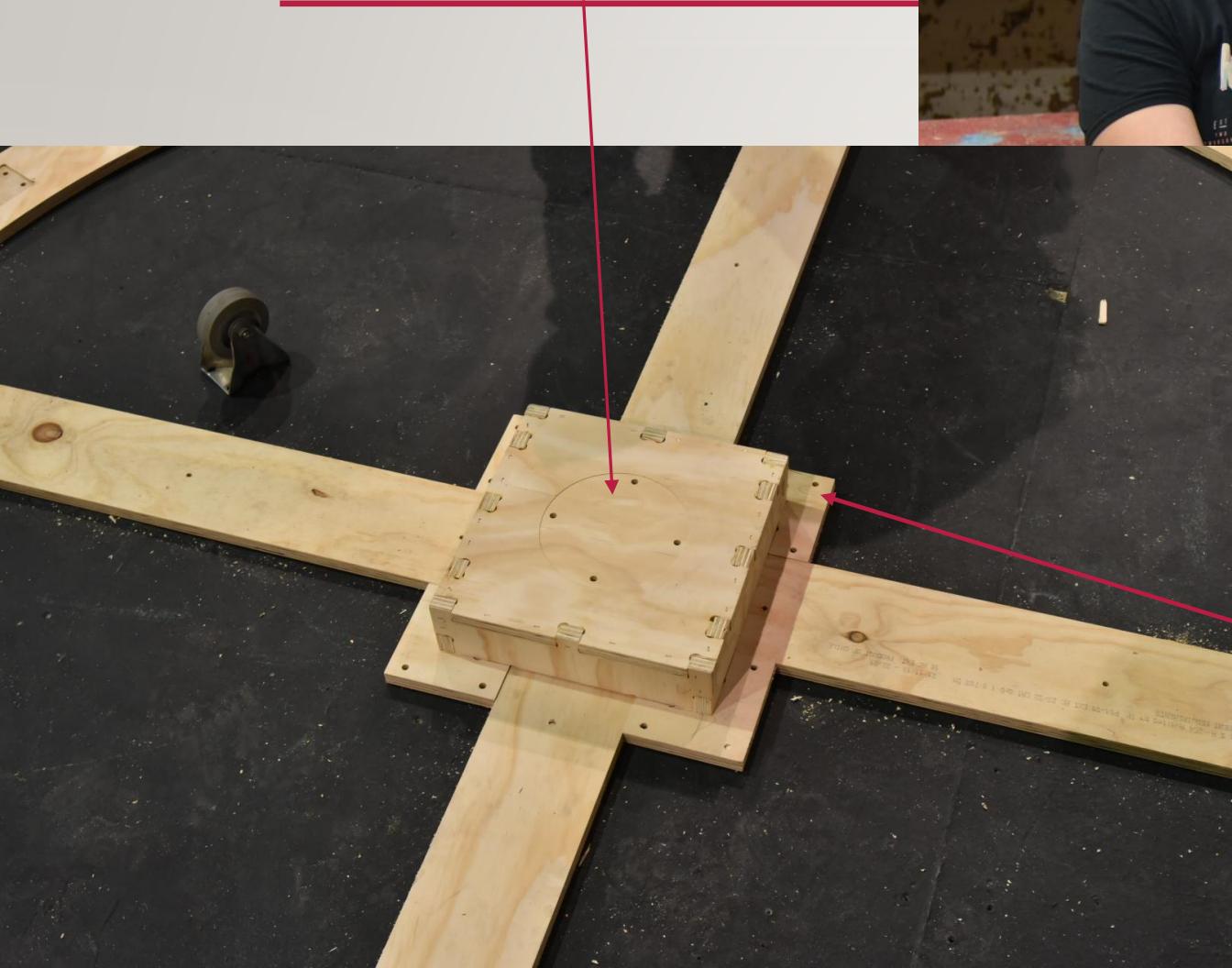
Half-lapped Center Joint with Center Hole for Easy Placement

Puzzled Joints for Quick Assembly and Future Expansion



# PIVOT STAND

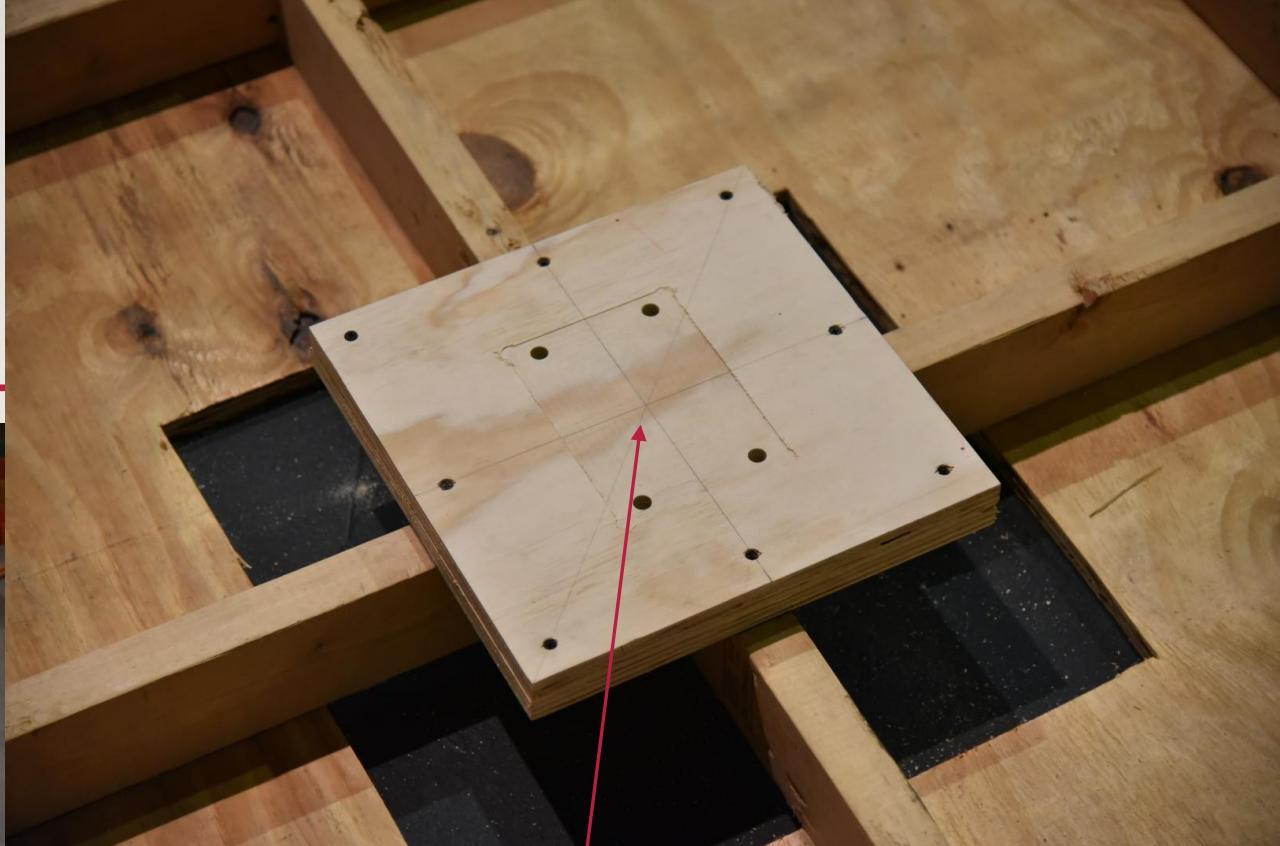
1/8" Depth Pocket Cut for  
Pivot Indexing



Indexed Feet Bolted to the  
Floor to Resist Torsional  
Forces

# PLATFORM

3 Layer Ply Ring attached to bottom of stock platform. Ring is larger than platform itself to ensure that motor uses the true circle for movement.



Center Plate with  $1/16"$  Pocket Cut for Pivot Indexing and Easy Placement

# FINAL ASSEMBLY

Access Panel cut into top of platform to allow bolting of plate to pivot

We then checked to make sure casters were level and adjusted the unit as a whole.

