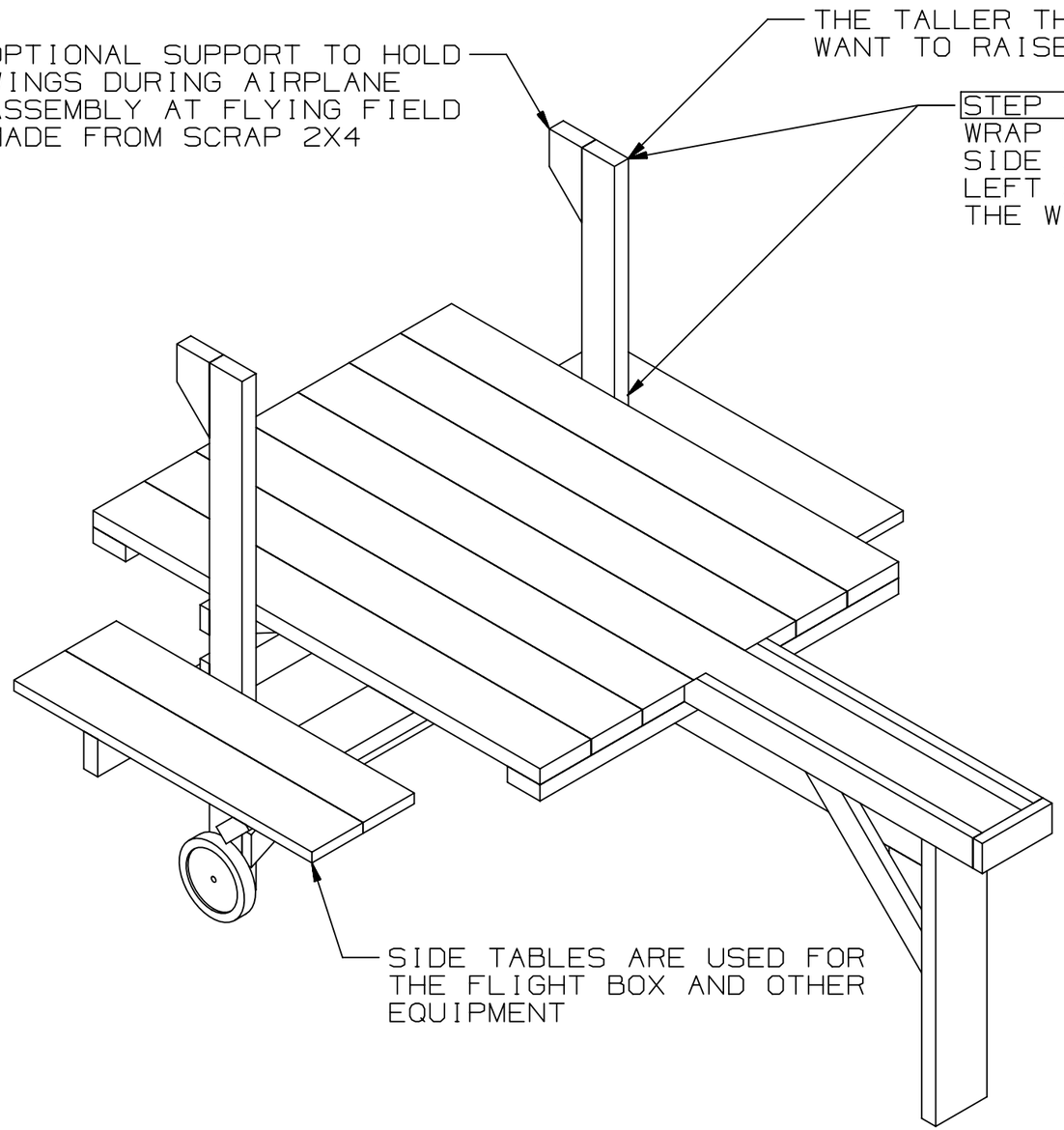
Assembly Process

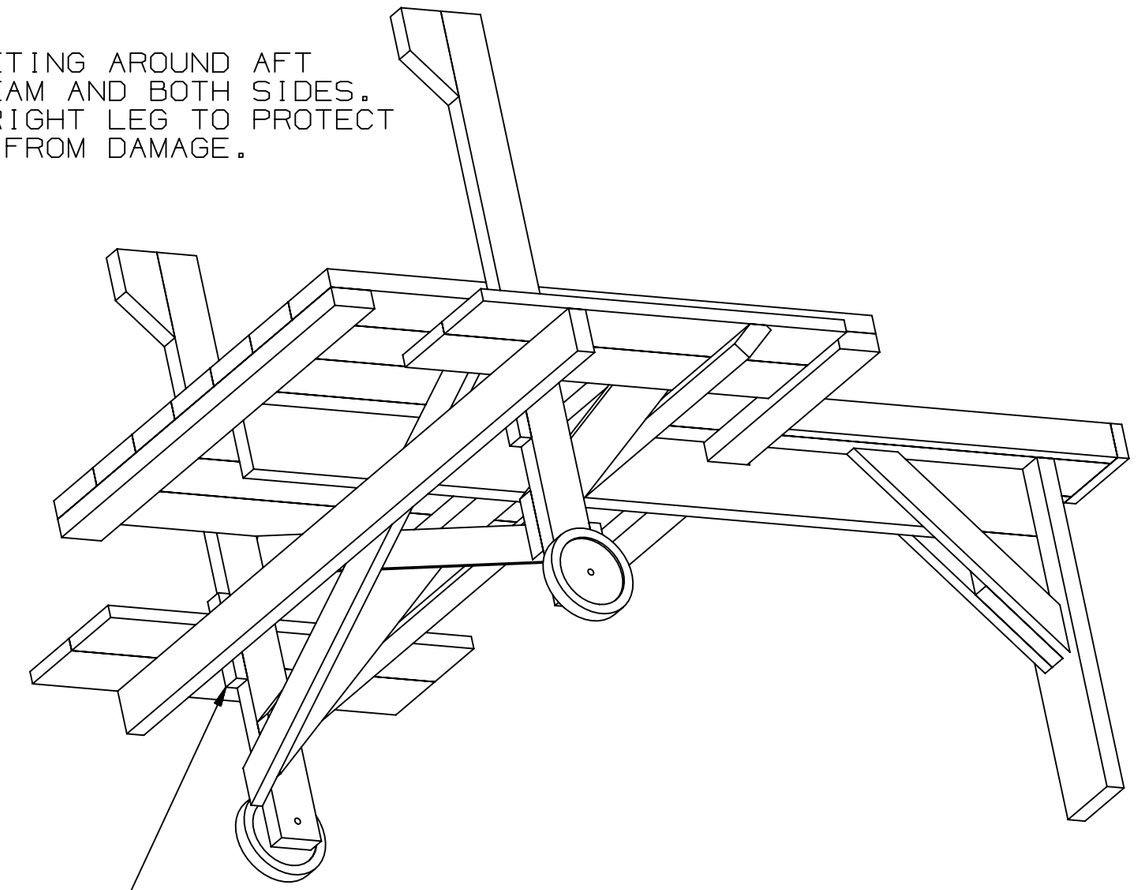
1) ASSEMBLE TOP SURFACE
2) ADD FRONT LEG ASSEMBLY WITH WHEELS ATTACHED, THIS INCLUDES THE ANGLED LEG SUPPORTS
3) ADD FRONT LEG CROSS BEAMS
4) ADD BACK LEG AND ANGLED SUPPORTS
5) ADD TAIL BUMPERS ON AFT SECTION OF TOP SURFACE
6) ADD BEAMS TO SUPPORT SIDE TABLES
7) ADD DECK BOARDS FOR SIDE TABLES
8) ADD CARPETING AROUND POST ABOVE TOP SURFACE

MATERIAL LIST TO BUILD TWO DIFFERENT STANDS

	1X6	2X4	2X6
27.5" WIDE STAND	3X	4X	4X
38.5" WIDE STAND	3X	5X	5X

7" WHEELS WITH ATTACH BOLTS
CARPETING
EXTERIOR DECK SCREWS



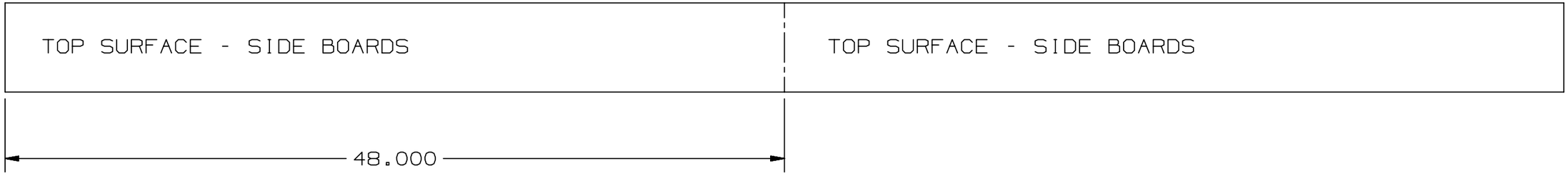


ENGINE RUN-UP STAND

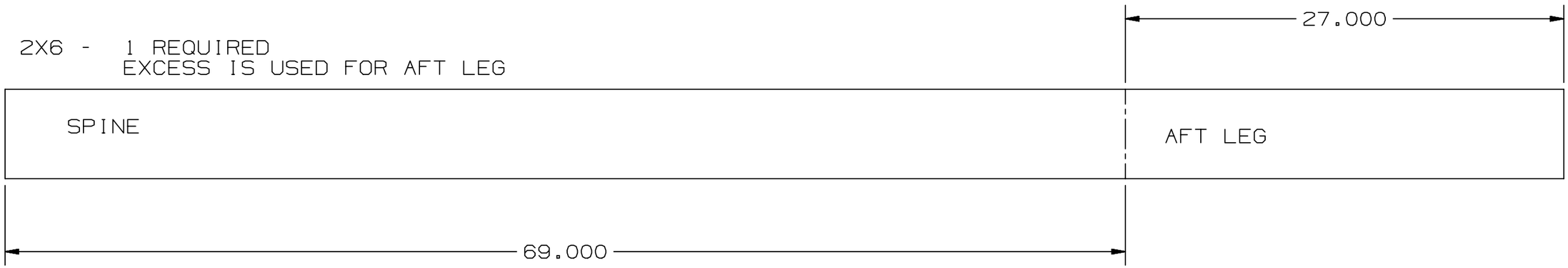
DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

MATERIAL LIST FOR 38.5" WIDE STAND
2X6 BOARDS - EXTERIOR GRADE

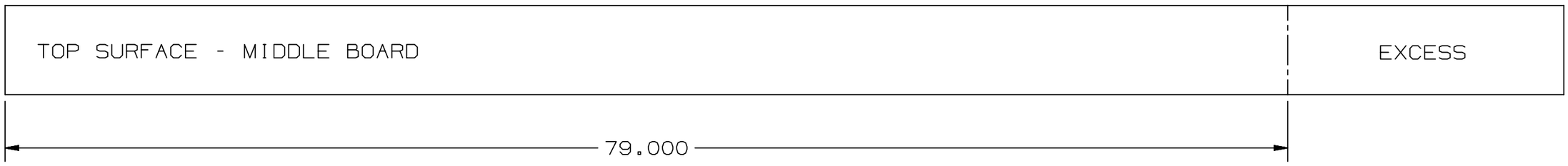
2X6 - 3 BOARDS REQUIRED
MAKES 6 PARTS



2X6 - 1 REQUIRED
EXCESS IS USED FOR AFT LEG



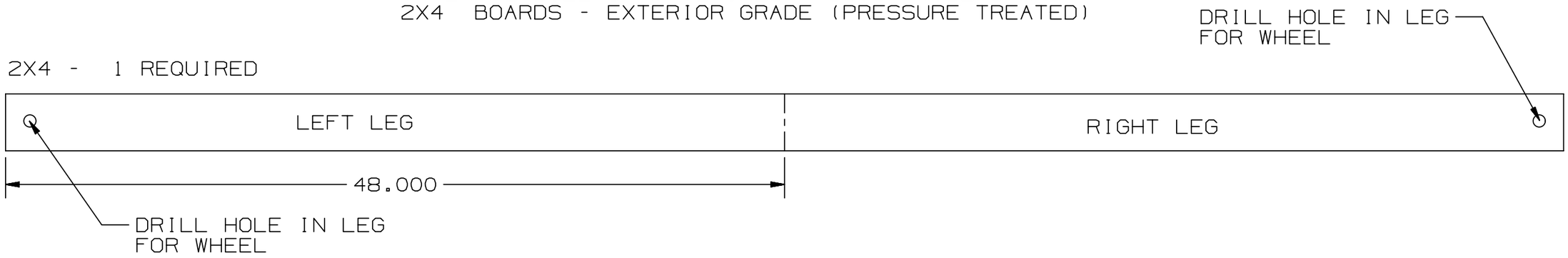
2X6 - 1 REQUIRED
EXCESS IS USED FOR AFT LEG GUSSET



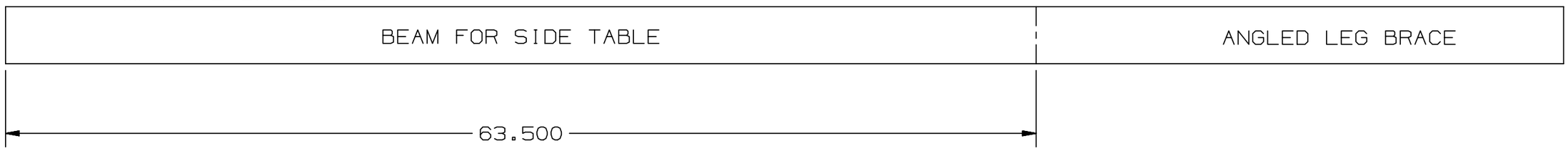
ENGINE RUN-UP STAND
DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

MATERIAL BILL OF MATERIALS - 38.5" WIDE STAND
2X4 BOARDS - EXTERIOR GRADE (PRESSURE TREATED)

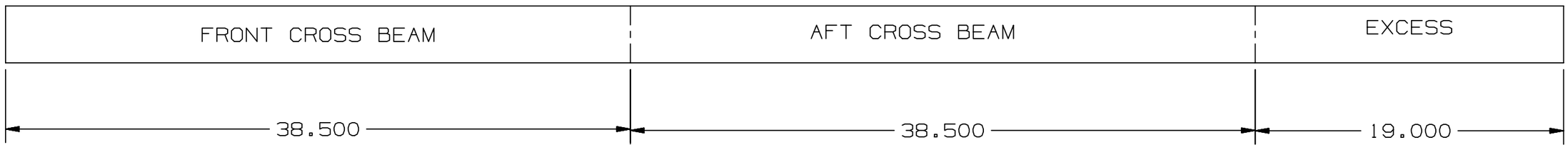
2X4 - 1 REQUIRED



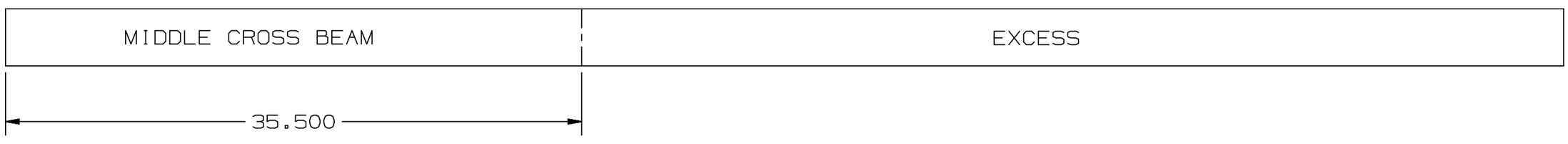
2X4 - 2 REQUIRED
MAKES 2 BEAMS
MAKES 2 BRACES



2X4 - 1 REQUIRED
WHEN BUILDING THE 27.5" STAND THIS PART CAN MAKE ALL THREE OF THE CROSS BEAMS



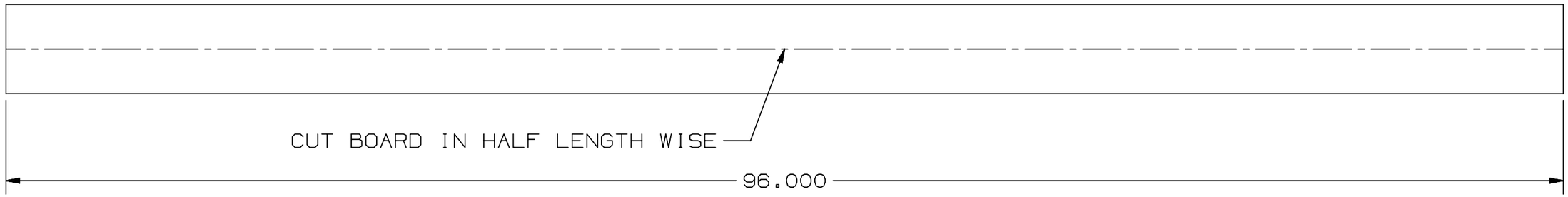
2X4 - 1 REQUIRED



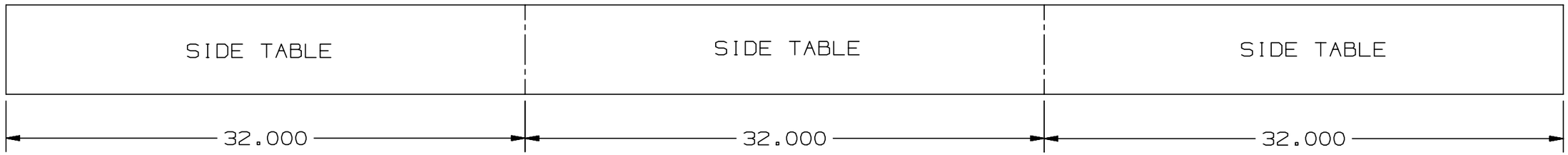
ENGINE RUN-UP STAND
DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

MATERIAL BILL OF MATERIALS - 38.5" WIDE STAND
1X6 BOARDS - EXTERIOR GRADE (PRESSURE TREATED)

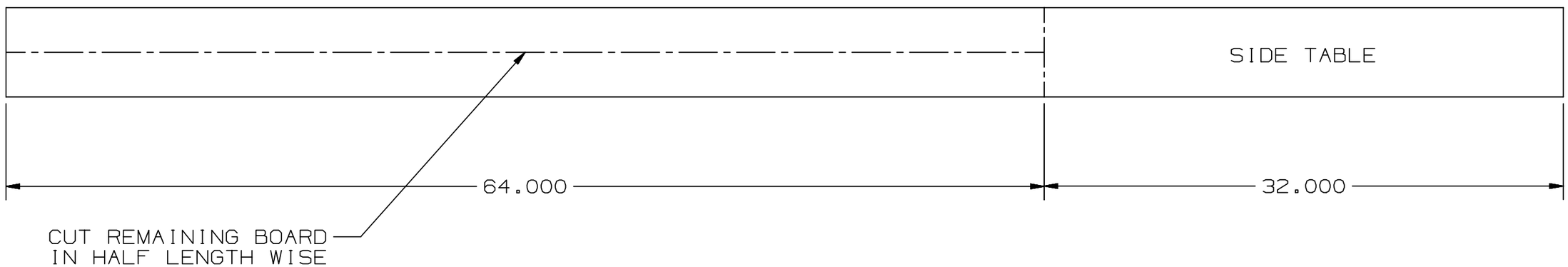
1X6 - 1 BOARDS REQUIRED
CUT BOARD IN HALF LENGTH WISE AND CUT TO LENGTH



1X6 - 1 BOARD REQUIRED
CUT INTO THREE 32" LONG PIECES FOR THE SIDE TABLES

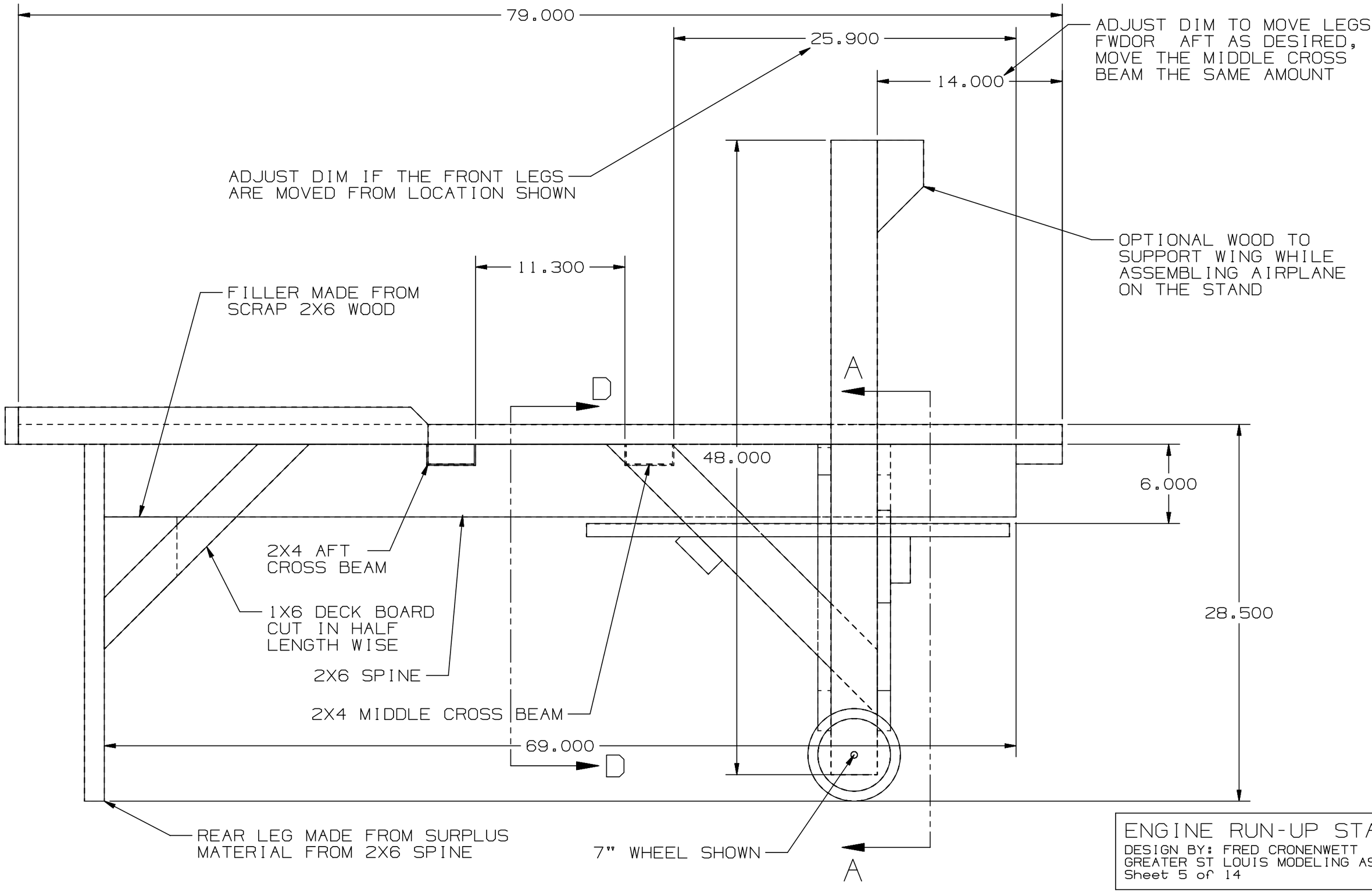


1X6 - 1 BOARD REQUIRED
CUT 32" LONG PIECE OFF FOR THE SIDE TABLE THEN CUT IN HALF LENGTH WISE, THEN CUT MATERIAL AS REQUIRED



ENGINE RUN-UP STAND
DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

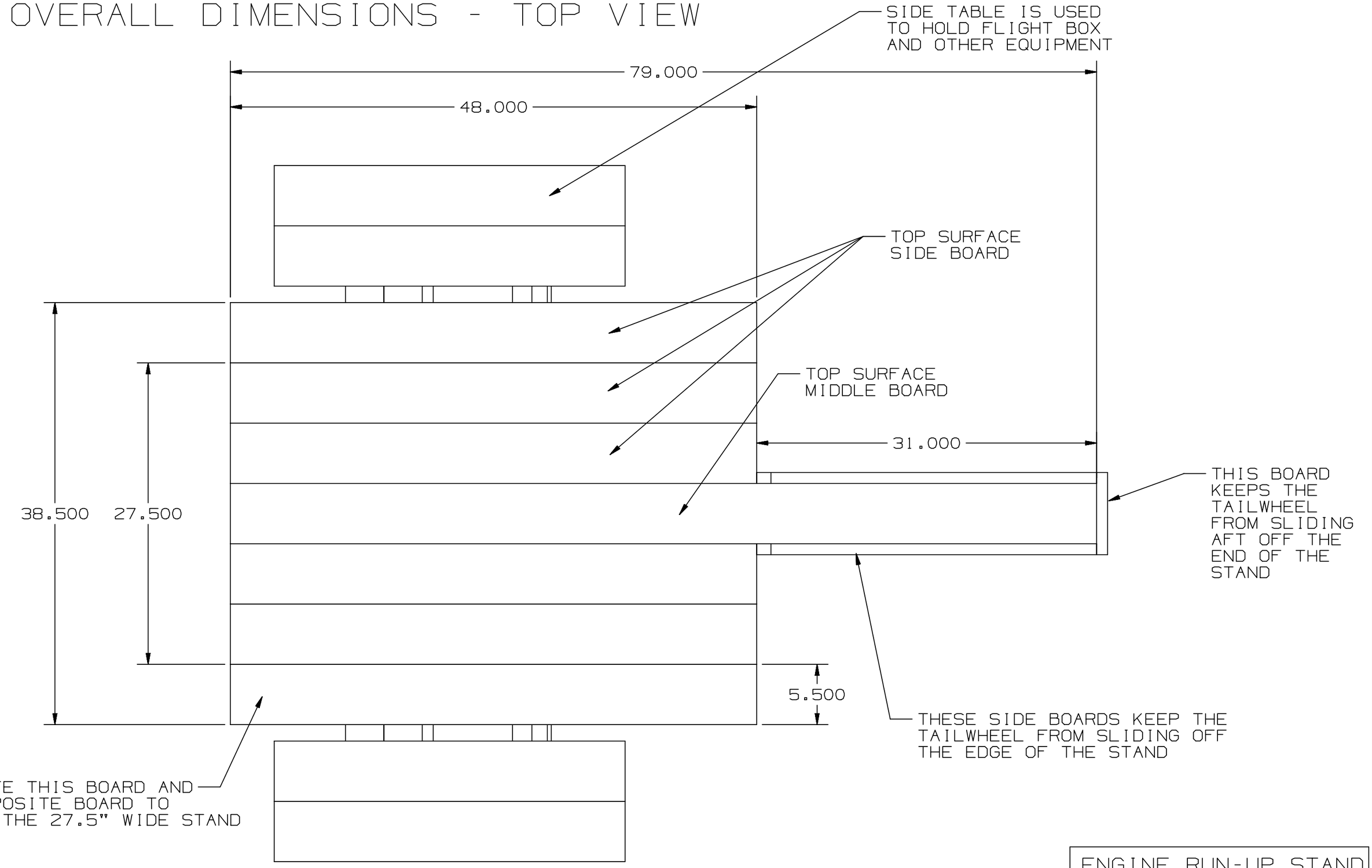
OVERALL DIMENSIONS - SIDE VIEW



ENGINE RUN-UP STAND

DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

OVERALL DIMENSIONS - TOP VIEW



ENGINE RUN-UP STAND

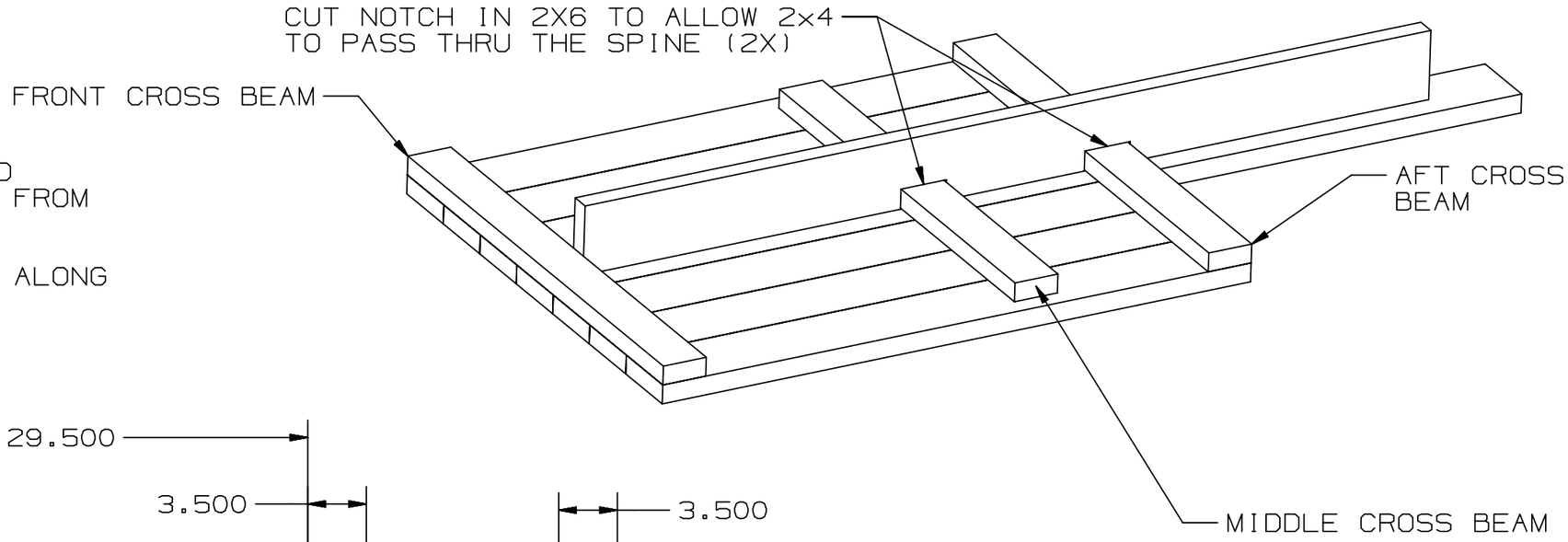
DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

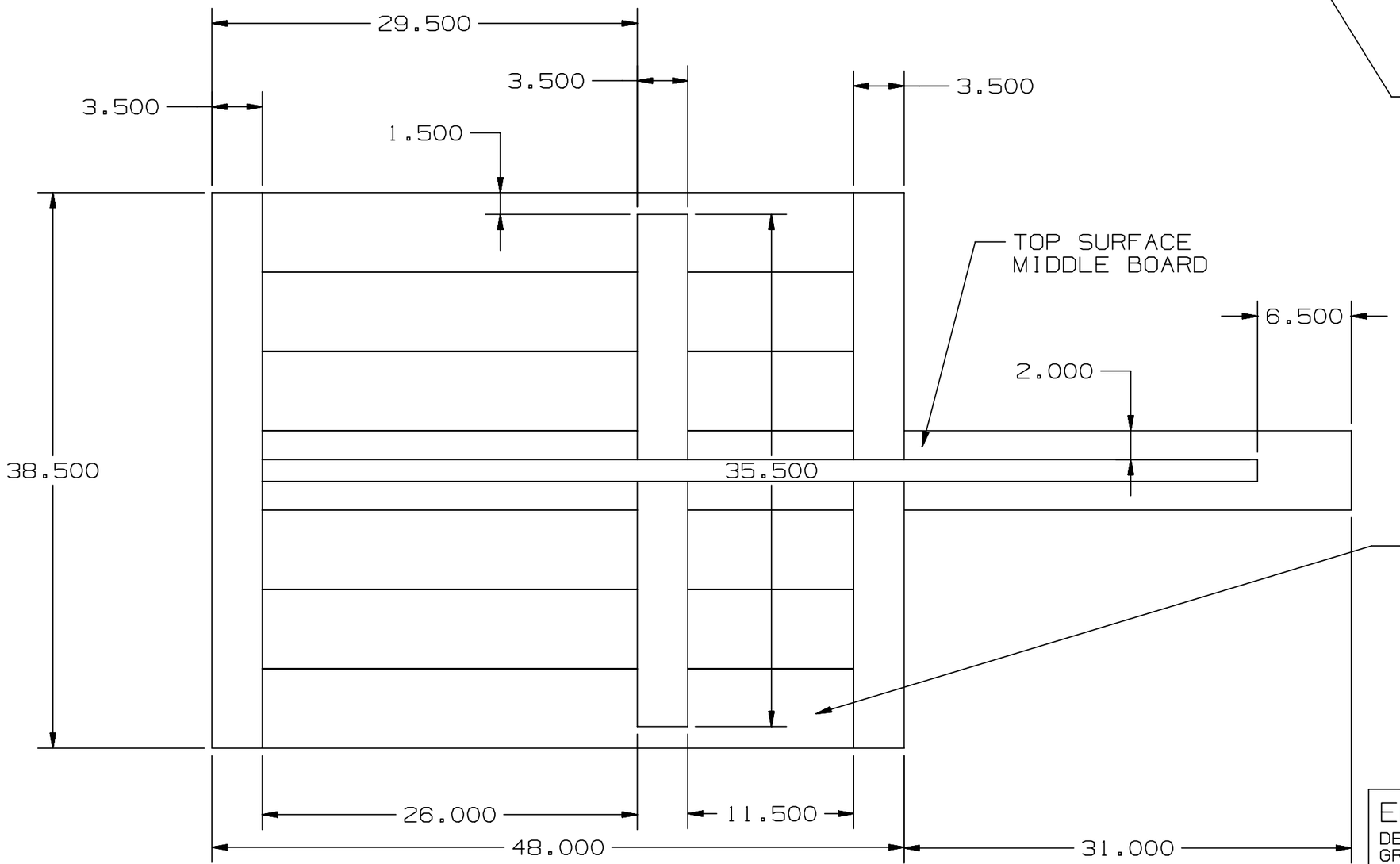
STEP #1

BUILD TOP SURFACE

A) WITH THE PARTS UPSIDE DOWN BUILD FLOOR UNIT. SCREWS ARE DRIVEN FROM BOTH BOTTOM AND TOP SURFACE

B) TURN UNIT OVER AND DRIVE SCREWS ALONG MIDDLE BOARD INTO THE SPINE





ENGINE RUN-UP STAND

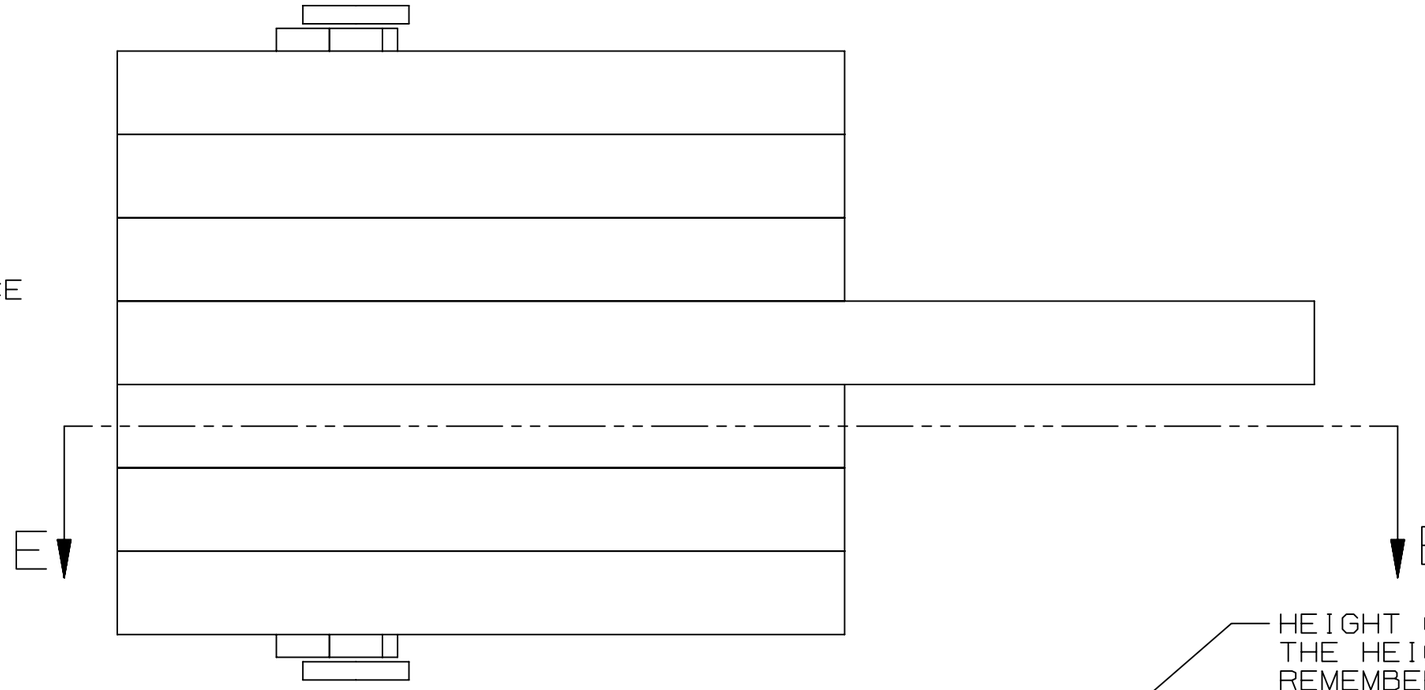
DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

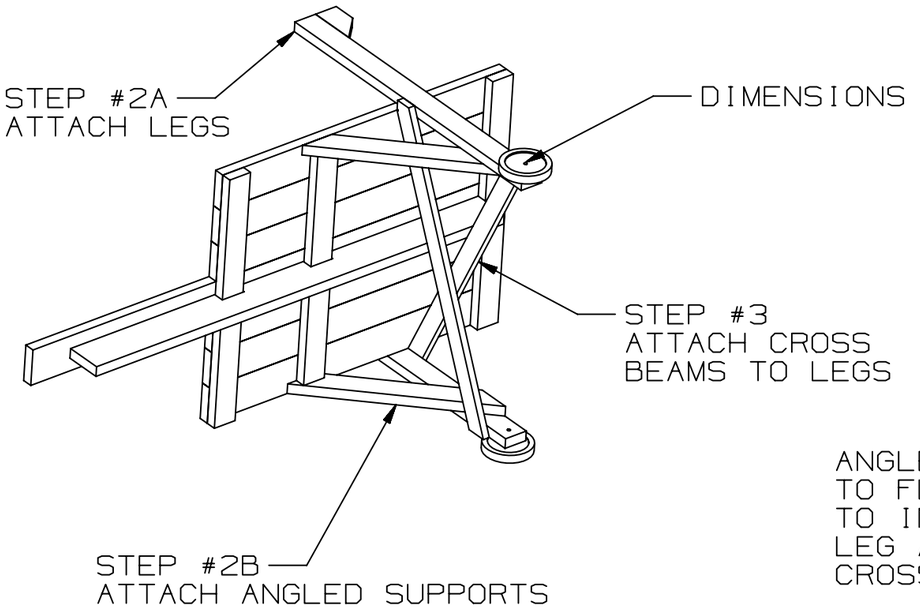
STEP #2

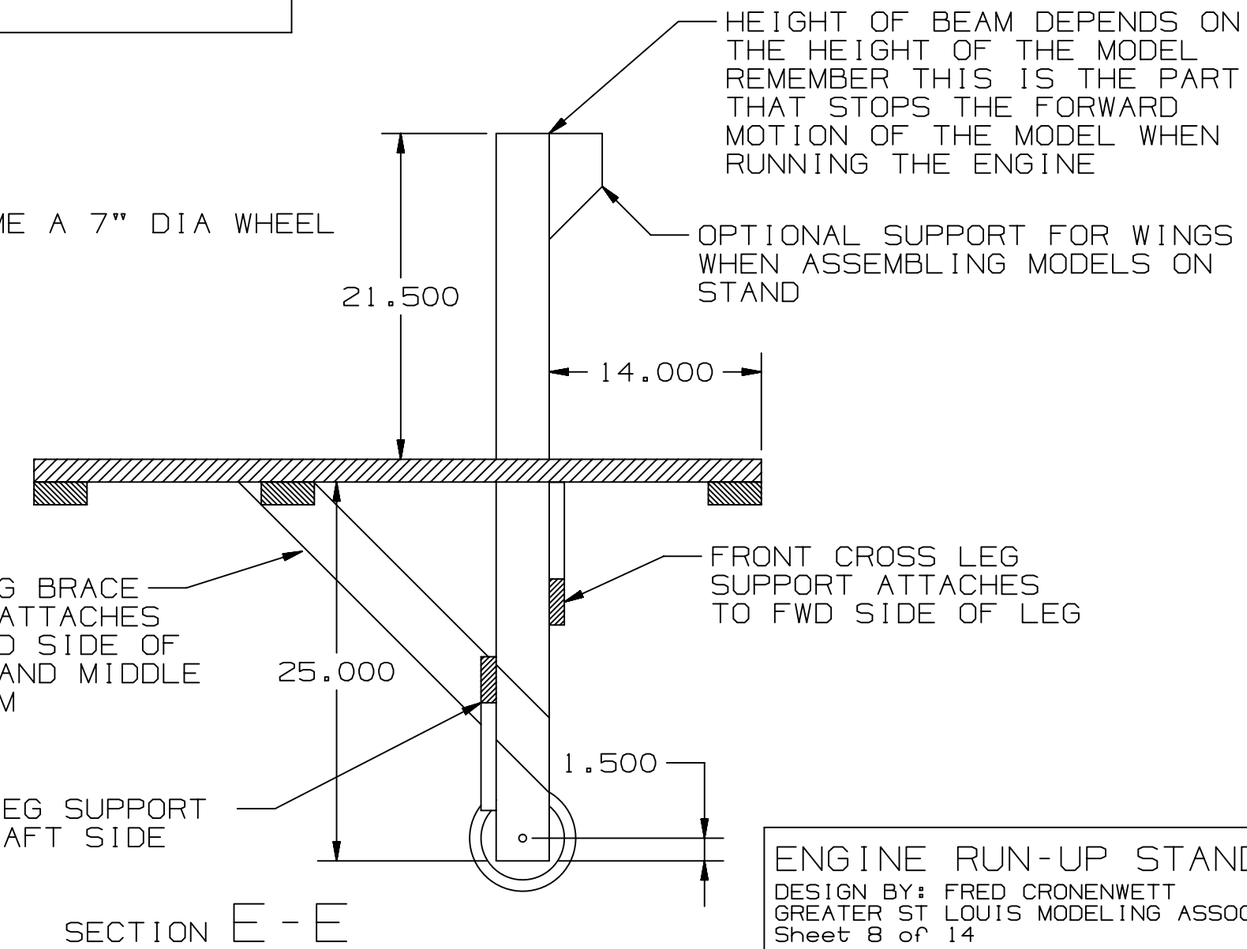
ATTACH LEGS TO TOP SURFACE
MAINTAIN HEIGHT FROM THE
GROUND LEVEL. MARK LEG WITH
TAPE TO REFLECT DIM FROM
THE GROUND

2A - ATTACH LEGS TO TOP SURFACE

2B - ATTACH ANGLED SUPPORTS





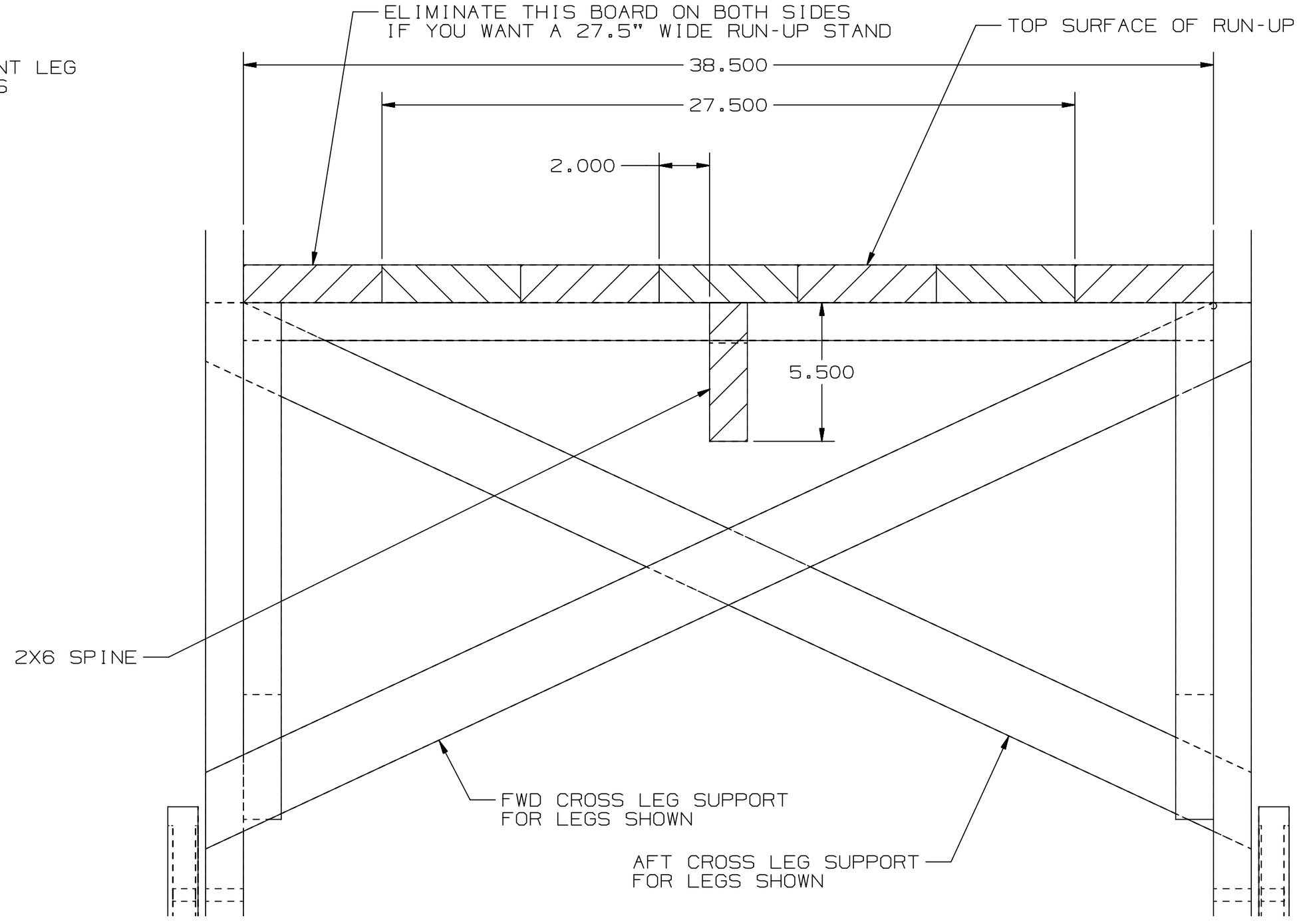


ENGINE RUN-UP STAND

DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

STEP #3

ATTACH FRONT LEG
CROSS BEAMS

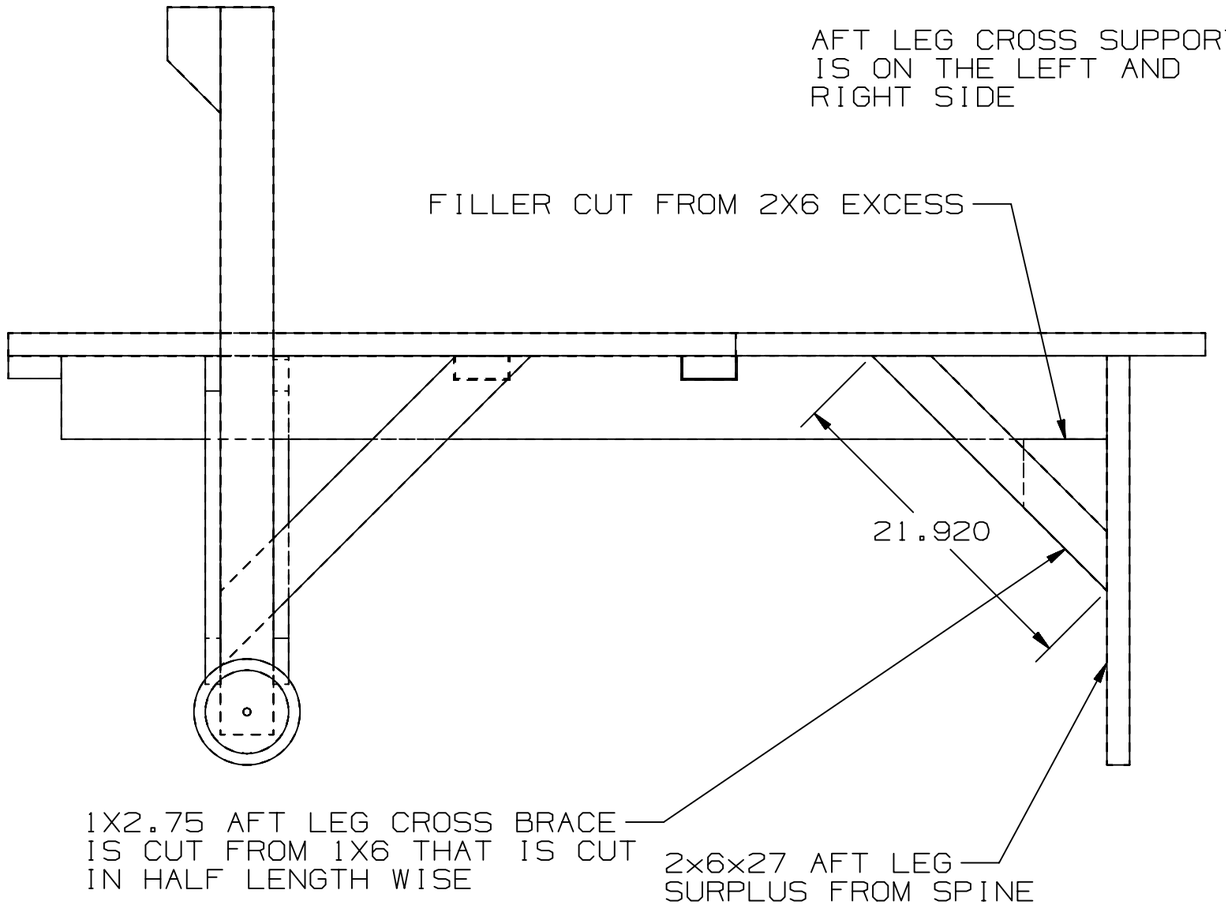


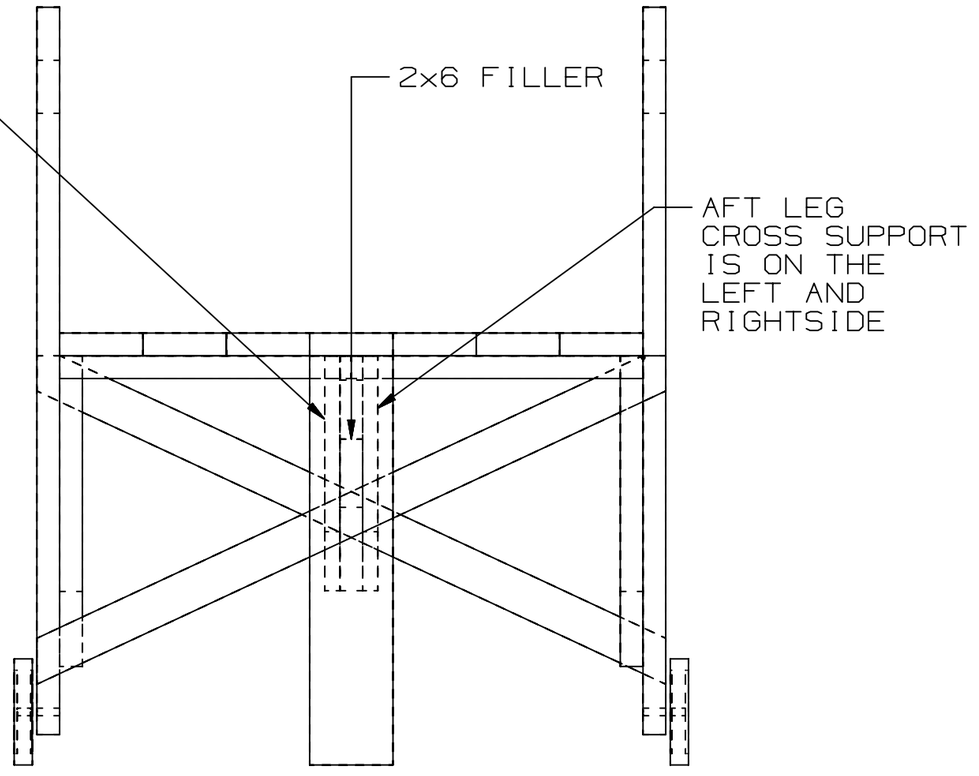
SECTION D - D
VIEW LOOKING AFT

ENGINE RUN-UP STAND
DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

STEP #4

ATTACH AFT LEG



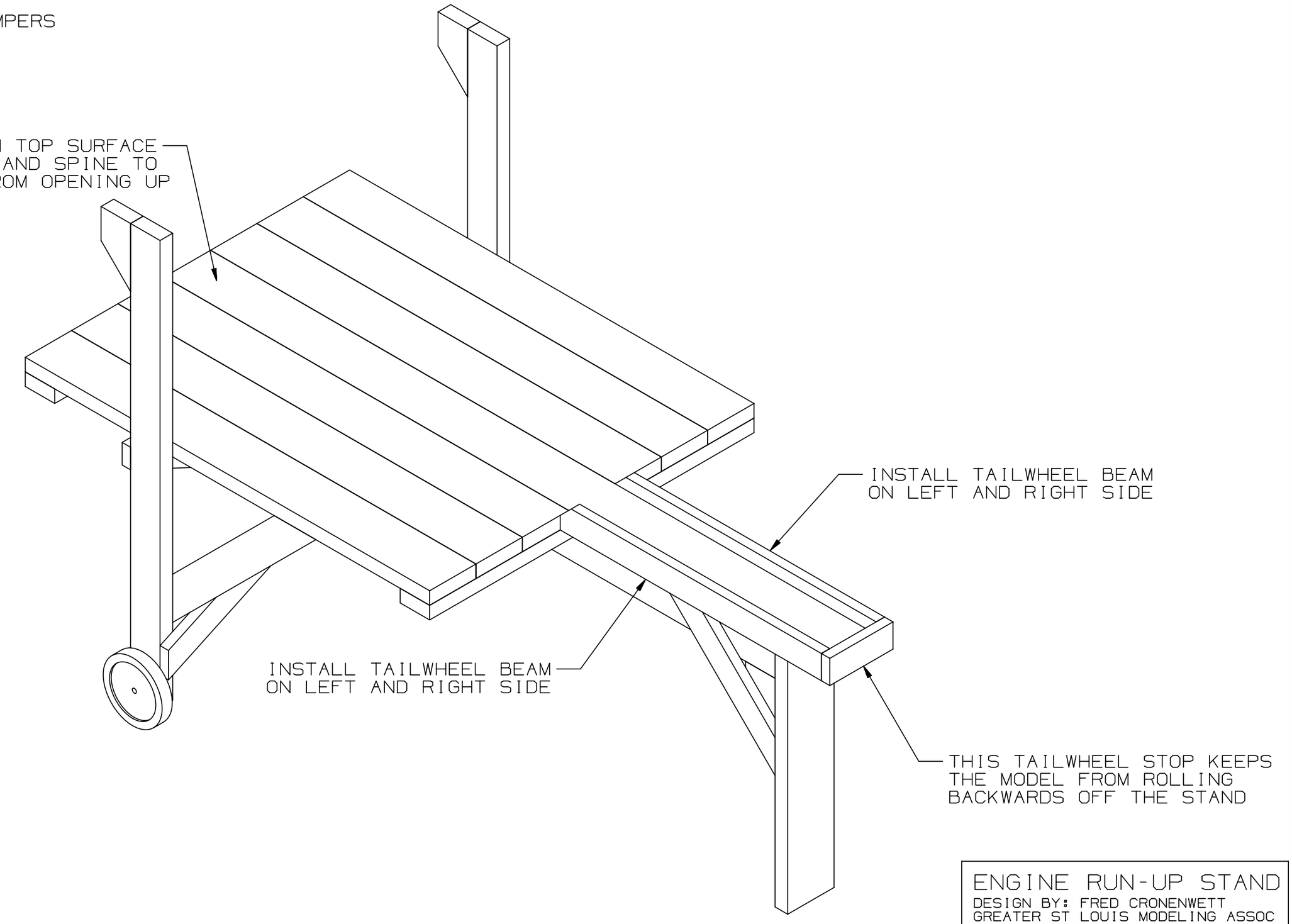


ENGINE RUN-UP STAND

DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

STEP #5

ATTACH TAILWHEEL BUMPERS

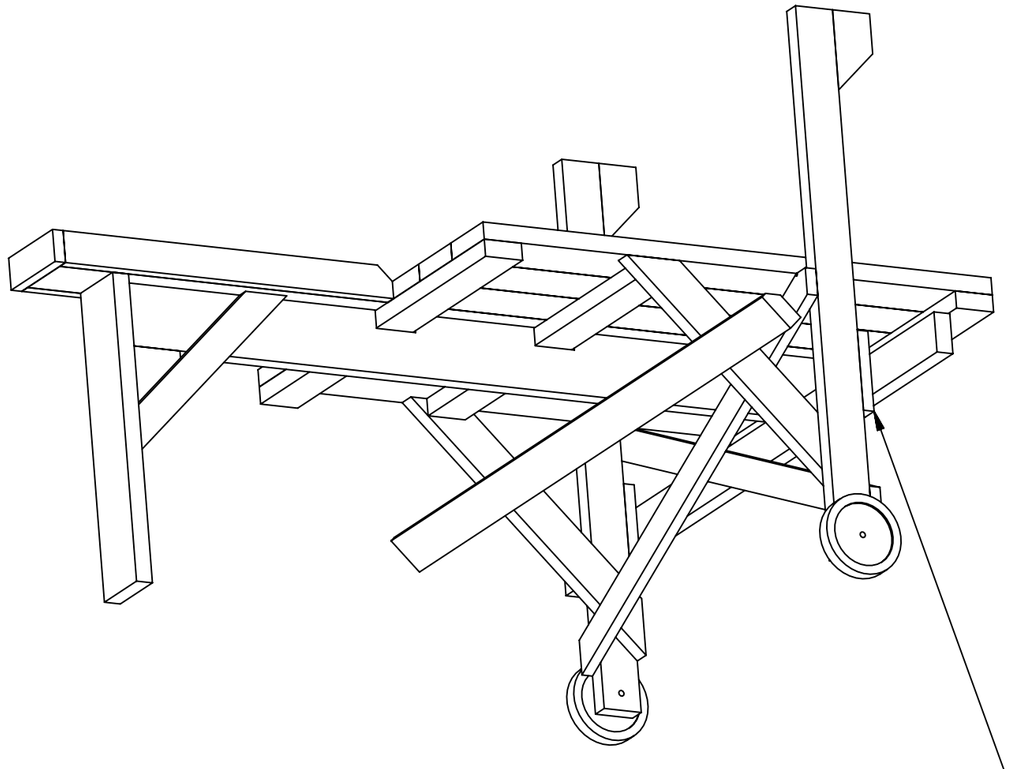


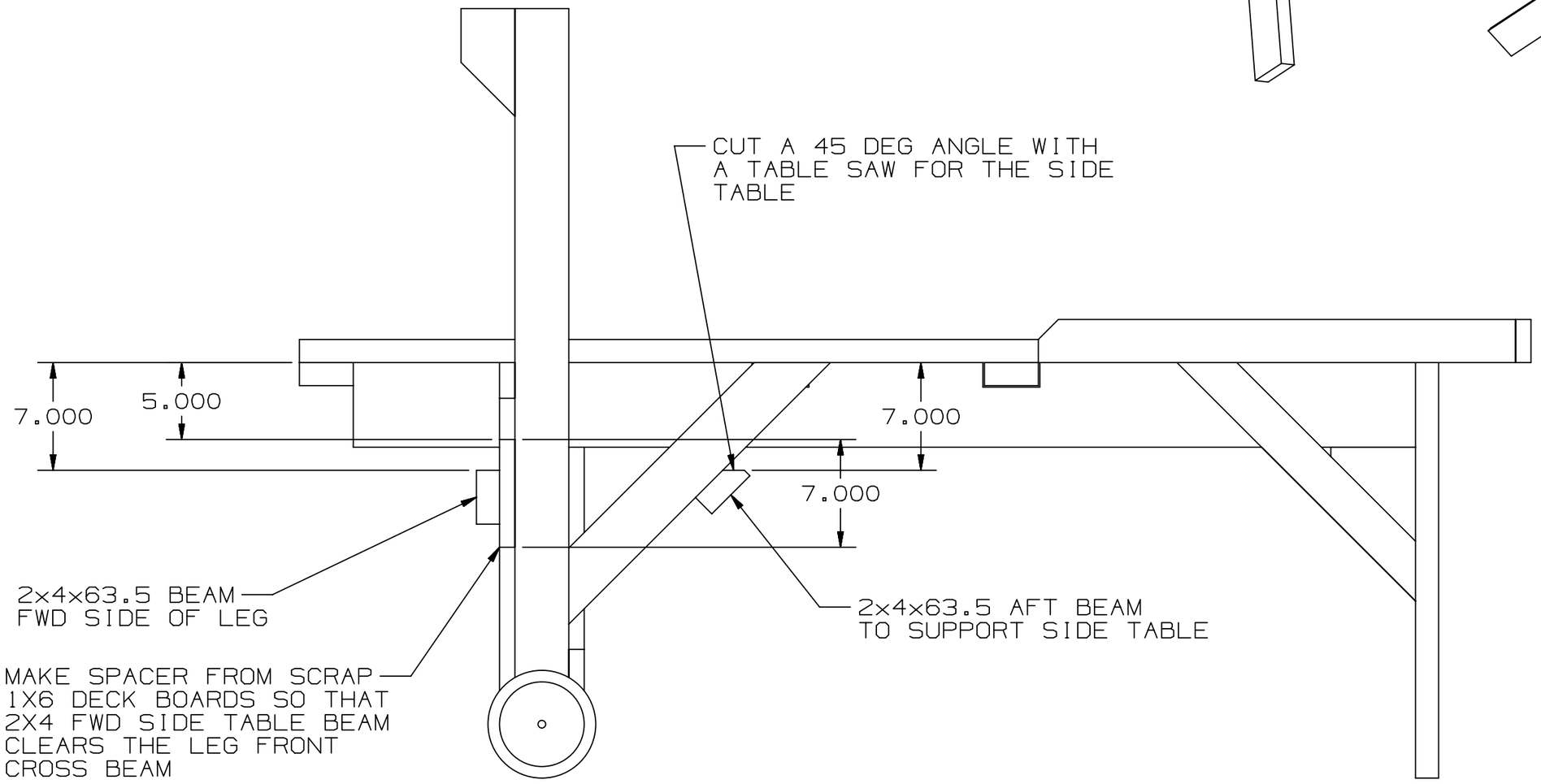
ENGINE RUN-UP STAND

DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

STEP #6

ATTACH SIDE TABLE BEAMS



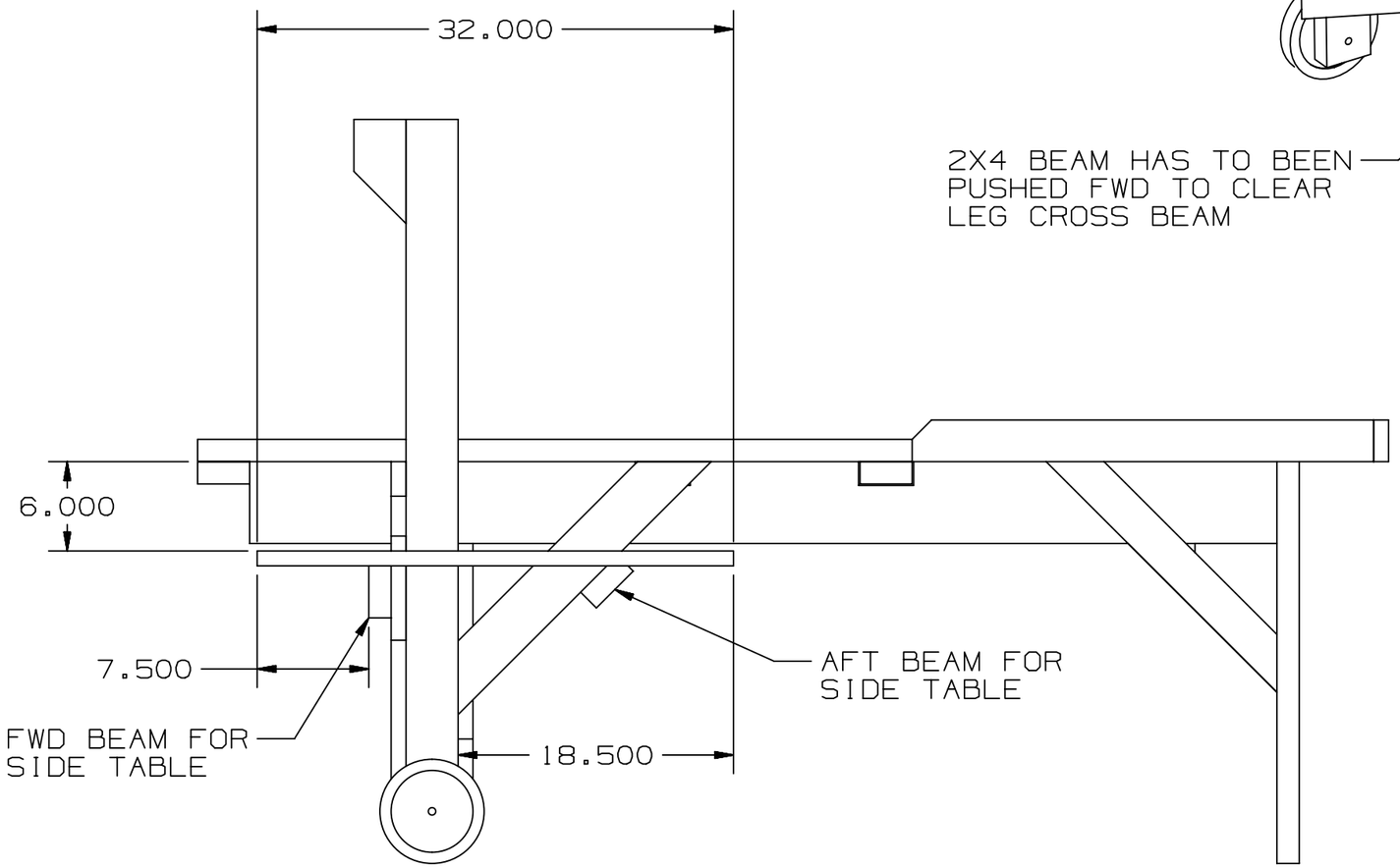


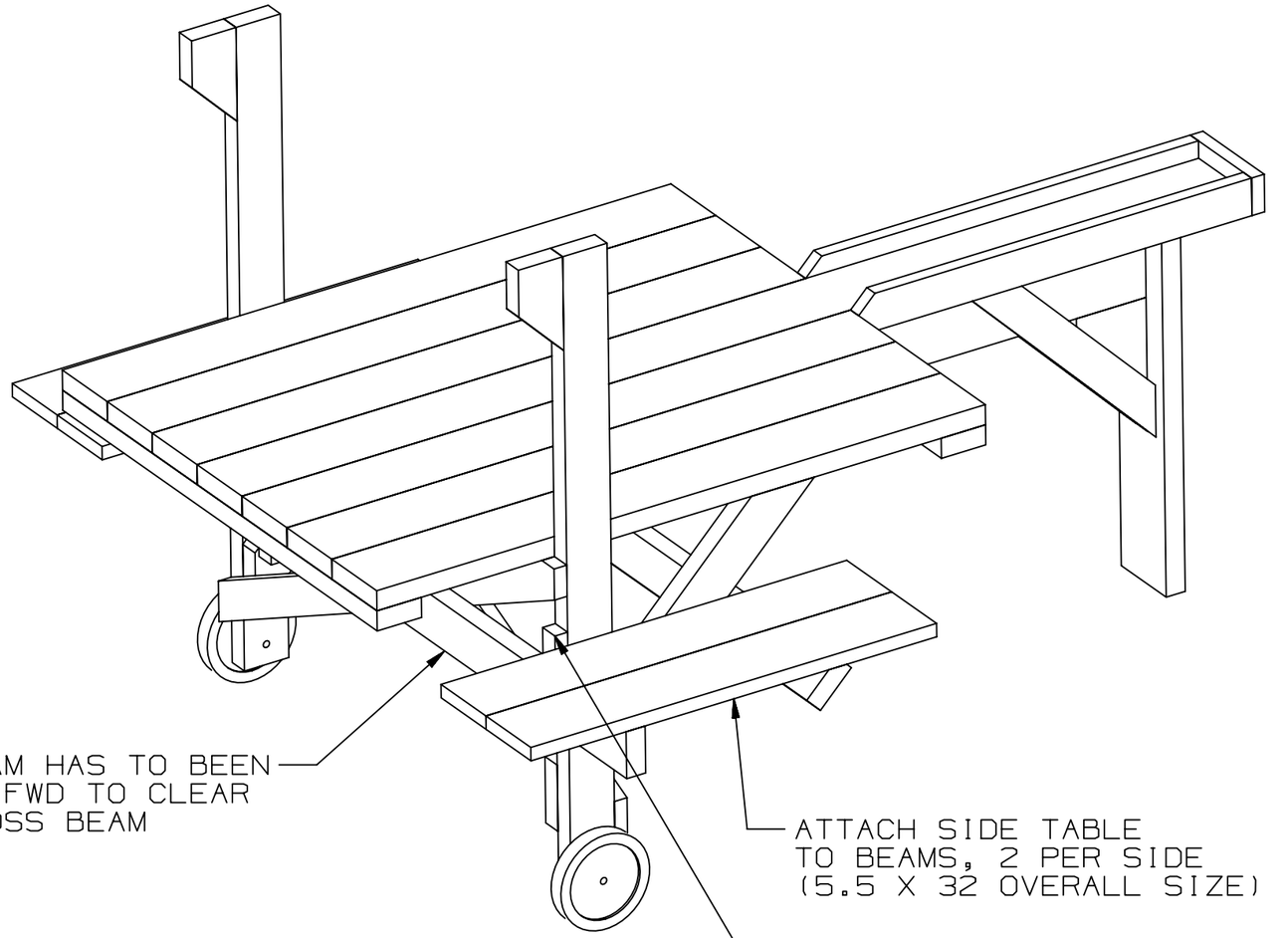
ENGINE RUN-UP STAND

DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

STEP #7

ATTACH SIDE TABLES





ENGINE RUN-UP STAND

DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC

BACKGROUND INFORMATION AND NOTES:

1) THE DESIGN HERE IS A VARIATION OF THE ENGINE RUN-UP STANDS THAT WERE AT BUDER PARK IN ST LOUIS, MO IN 2018

2) THE SIDE TABLES WERE ADDED TO THE EXISTING RUN-UP STANDS AT BUDER PARK AND THE DESIGN PRESENTED HERE

3) FOR THE ENGINEERS WHO ARE READING THIS, THERE WAS NO STRUCTURAL ANALYSIS DONE

4) AN AVERAGE SIZE PERSON SAT ON SEVERAL RUN-UP STANDS TO VERIFY THE STRUCTRAL INTEGRITY OF THE DESIGN

5) THIS DESIGN ASSUMES THE RUN-UP STANDS WILL BE EXPOSED TO SNOW, RAIN, SUN, HEAT AND COLD.

6) USE OF WOOD THAT CAN HANDLE RAIN AND SNOW IS HIGHLY ENCOURAGED

7) THE CARPETING THAT PROTECTS THE WINGS FROM DAMAGE WILL HAVE TO BE REPLACED AFTER TWO OR MORE SEASONS, DO NOT GET FANCY CARPETING FOR THIS. WE PICKED UP OLD INTERIOR GRADE CARPETING AND FULLY EXPECT IT TO BE DESTROYED AFTER SEVERAL SEASONS OF SNOW AND RAIN

8) WE MADE NO EFFORT TO SEAL THE WOOD

9) EXTERIOR GRADE DECK SCREWS WERE USED TO ASSEMBLE THESE UNITS

10) WHEN IN DOUBT PUT SCREWS IN FROM BOTH SIDES OF THE JOINT, WE HAD MULTIPLE RUN-UP STANDS THAT NEEDED TO BE SCREWED BACK TOGETHER AGAIN, THE WOOD WAS GENERALLY OK AND ONLY A FEW WOOD PARTS HAD TO BE REPLACED WHEN WE FIXED THESE UNITS

11) GOOD LUCK, THESE RUN-UP STANDS WILL ALLOW PEOPLE TO SAFELY RUN THEIR ENGINES WITHOUT THE ASSISTANCE OF ANOTHER PERSON

12) USE WHAT EVER METHOD YOU FEEL WORKS THE BEST TO ATTACH THE WHEELS TO THE LEGS

ENGINE RUN-UP STAND
DESIGN BY: FRED CRONENWETT
GREATER ST LOUIS MODELING ASSOC