



# Plans and dimensions for a DIY roller-crimper build

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\* These plans are specific for the conversion of an International 490 disc into a roller-crimper, but the part dimensions and drum design can be scaled to fit many different size requirements.

# Project overview

## Unused disc (<30 ft.)

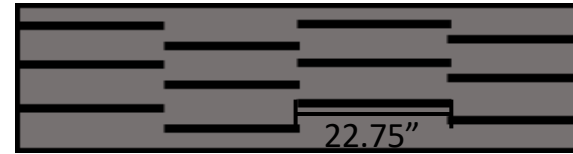
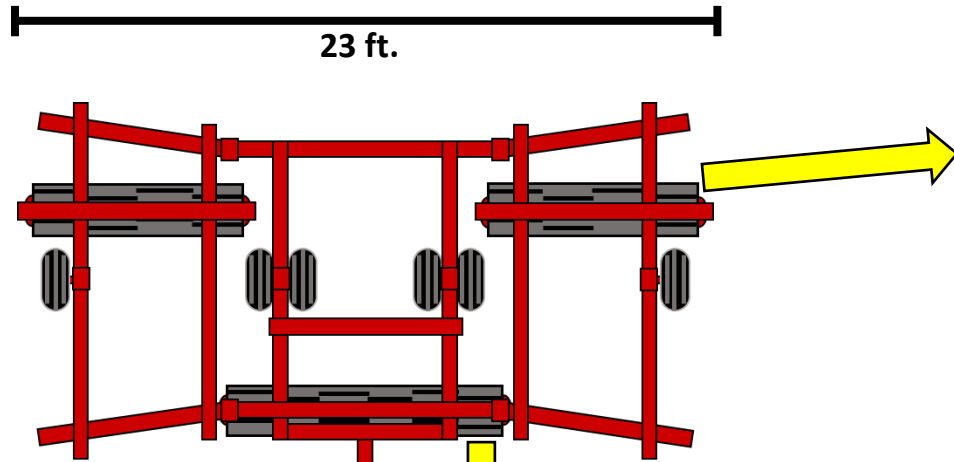


The plans and part dimensions in this document are for the conversion of an International 490 disc (22 ft.) (pictured left) into a roller-crimper (pictured below). There is an accompanying how-to video series available on Ecydsis Foundation's YouTube page.



**Roller crimper**

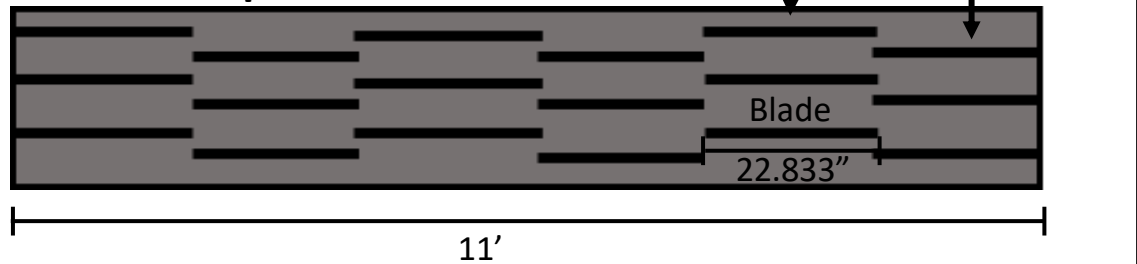
# Crimper drums



## Wing (6'8") crimper blades

n= 44 blades to complete each wing  
 Blade length= 20.75" each  
 1" overlap of blades @ each junction

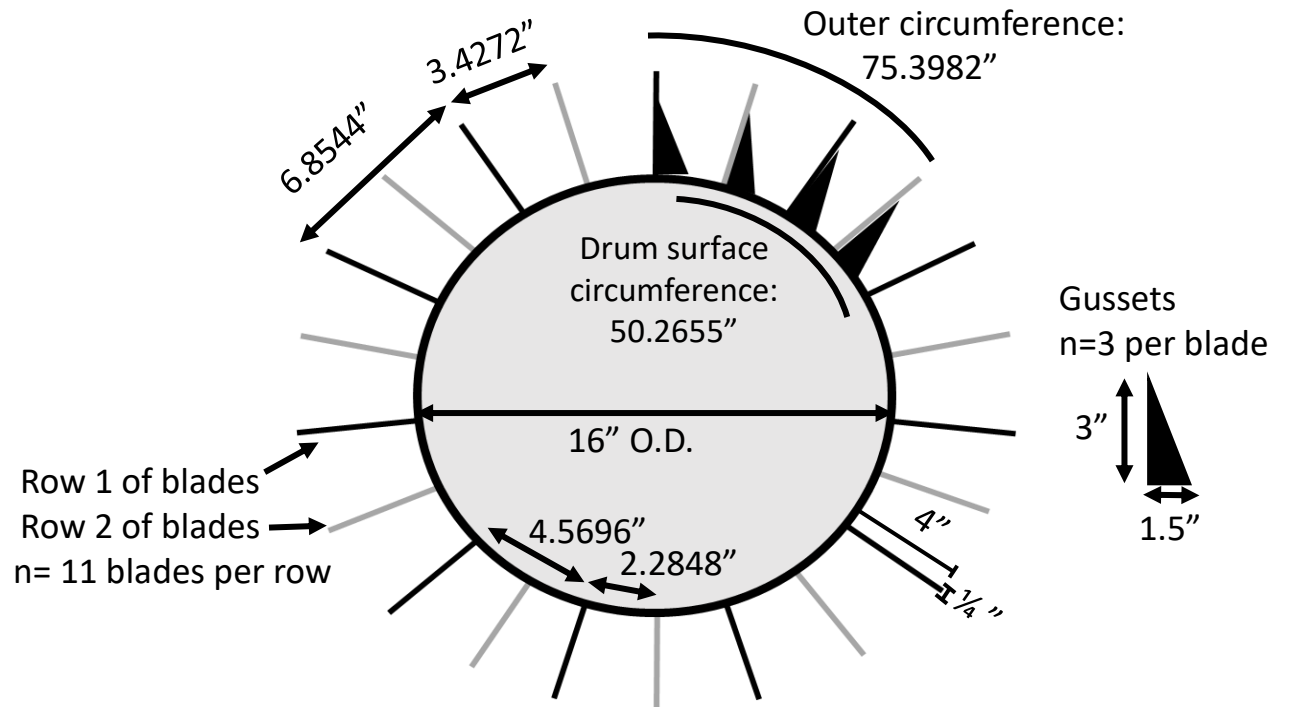
## Center crimper drum



## Center drum (11') crimper blades

n= 66 blades to complete the drum  
 Blade length= 22.833" each  
 1" overlap of blades @ each junction

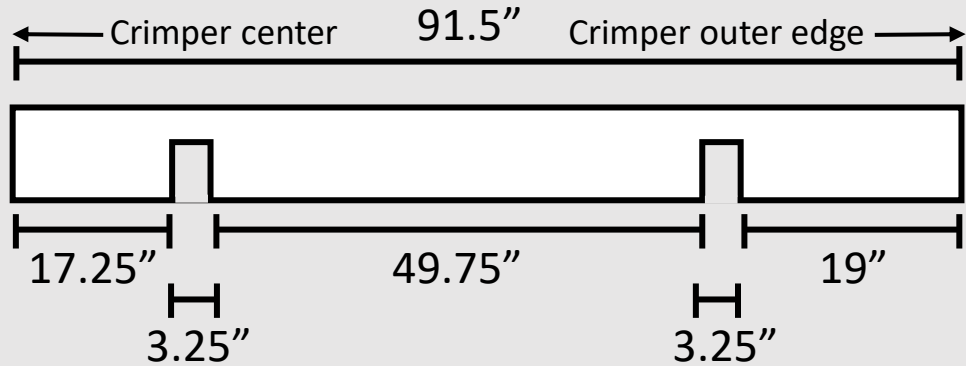
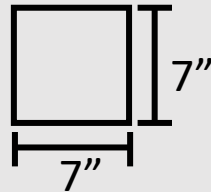
## LATERAL DRUM VIEW



# Drum hanging brackets and wing yokes

## Wing yoke

Wing yoke was a square steel tube, ¼" thick



Wing yoke was fashioned from the tool bar of a International 800 Cyclo Air planter. Notches in the tool bar were cut to specifically fit our International 490 disc frame. These measurements may need to be adjusted to meet your specific design requirements.

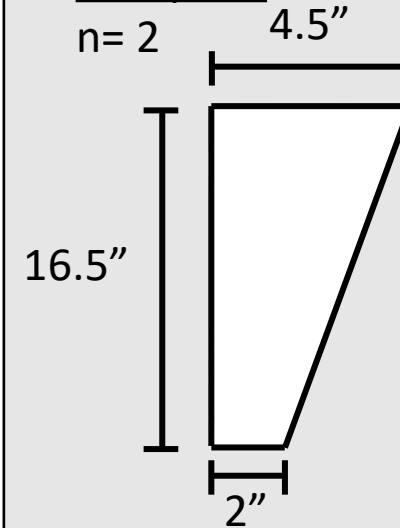


## Hanging bracket

Four pieces of ¼" thick steel welded together.

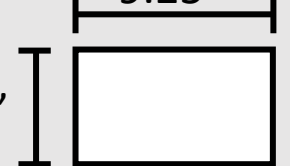
Side plate

n=2

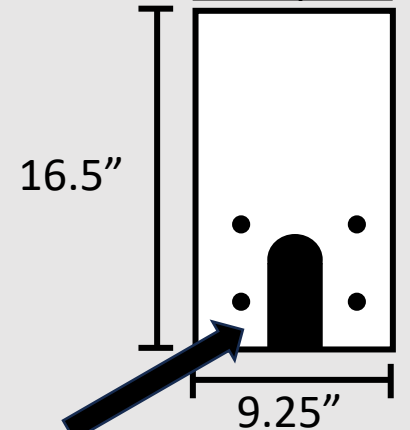


Top plate

9.25"



Back plate



Notch was cut in accordance with our drum diameter and disc frame height. Bolt holes were drilled to align with bearing housing. These measurements may need to be adjusted to meet your specific design requirements.

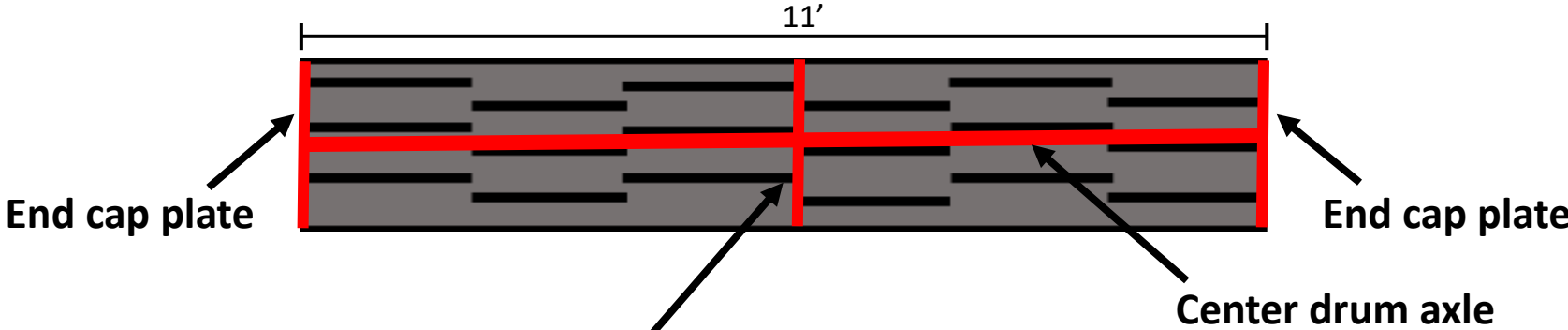
# Supplementary Material: Crimper drum assembly

## Hanging bracket



Assembled hanging bracket attached to finished crimper drum using bearing.

## Center crimper drum



## Center axle support plate



Three notches were cut into the center support plate to allow water to flow freely throughout the center drum.