# Timing and Position

The AMMQC program is an Equal Opportunity program.

Adaptive equipment is available upon request for individuals with disabilities.

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## COMPONENTS OF A MACHINE

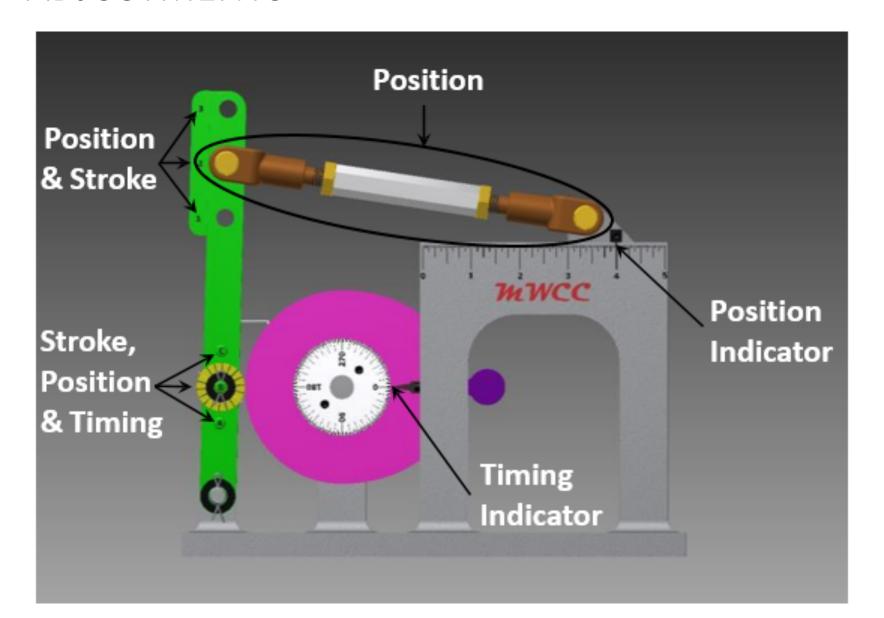


Position - Where a component is located any point in time, relative to a starting position

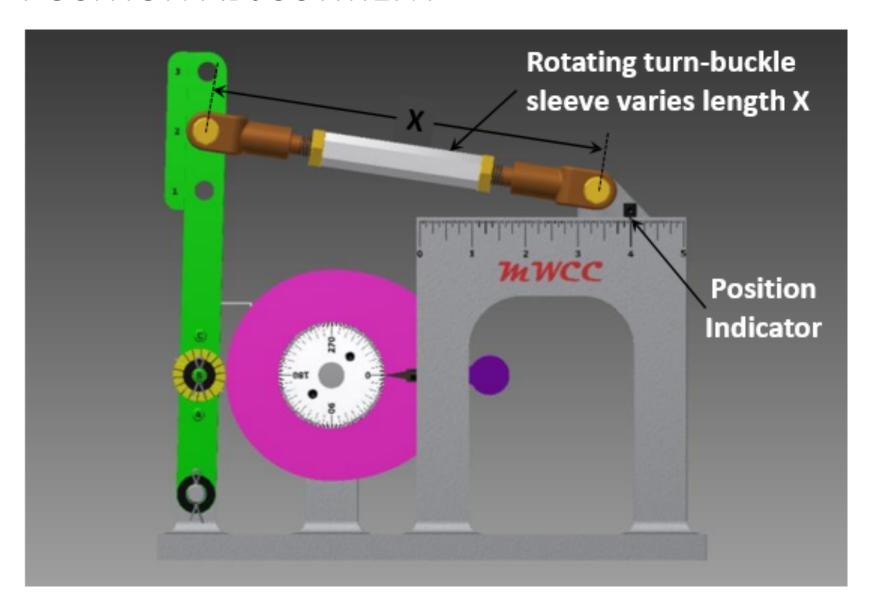
Stroke - The linear distance traveled by the slider in one direction from its starting position

Timing - When an action takes place in time, relative to a set start time

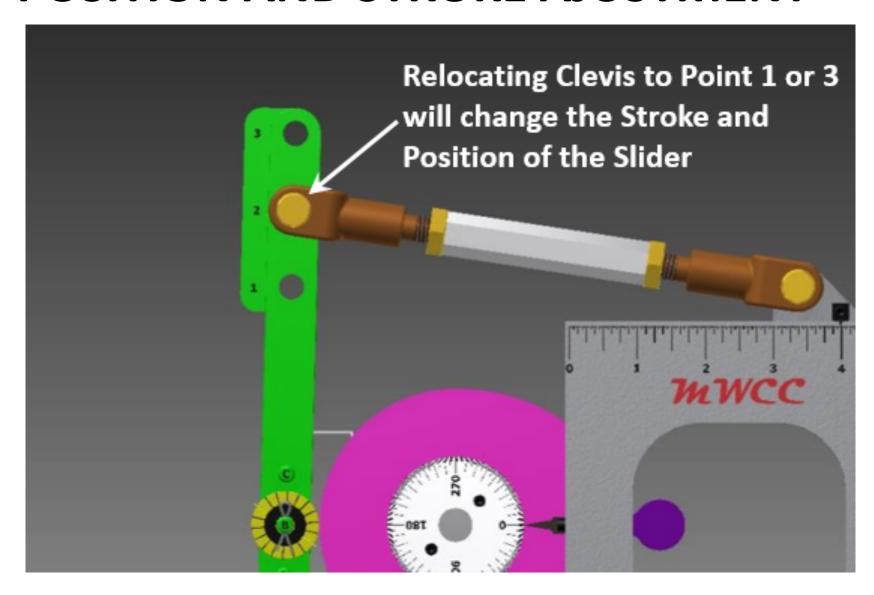
#### **ADJUSTMENTS**



#### POSITION ADJUSTMENT

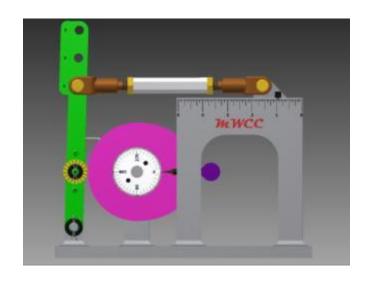


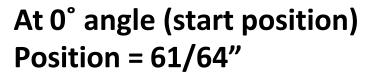
## **POSITION AND STROKE AJUSTMENT**

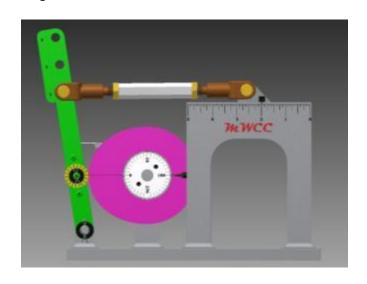


## POSITION AND STROKE ADJUSTMENT

#### Turn-buckle Clevis at Adjustment No. 1





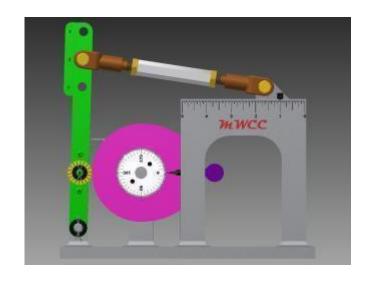


At  $180^{\circ}$  angle (end position) Position =  $1 - 62/64^{\circ}$ 

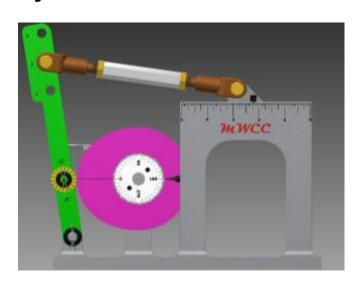
Stroke = (1-62/64") - 61/64" = 2-1/64"

#### POSITION AND STROKE ADJUSTMENT

#### Turn-buckle Clevis at Adjustment No. 2



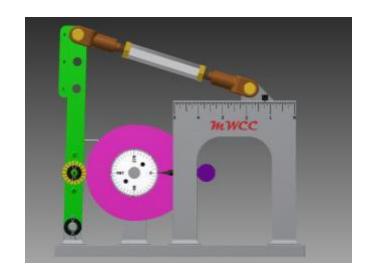
At 0° angle (start position) Position = 1"

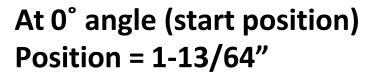


At  $180^{\circ}$  angle (end position) Position = 2 - 7/32''

## POSITION AND STROKE ADJUSTMENT

#### Turn-buckle Clevis at Adjustment No. 3

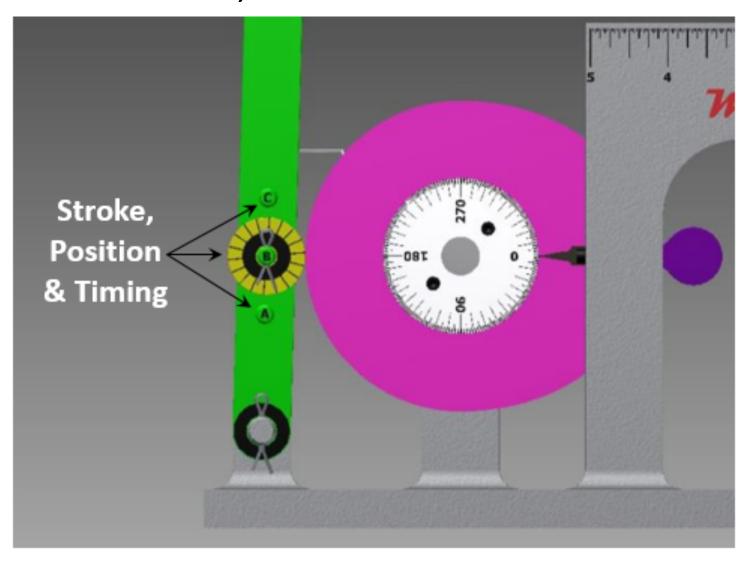




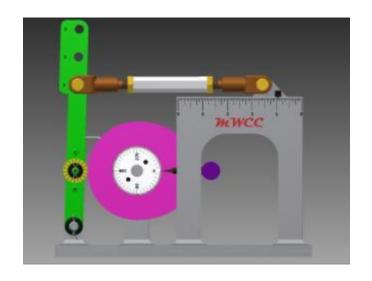


At  $180^{\circ}$  angle (end position) Position =  $2 - 40/64^{\circ}$ 

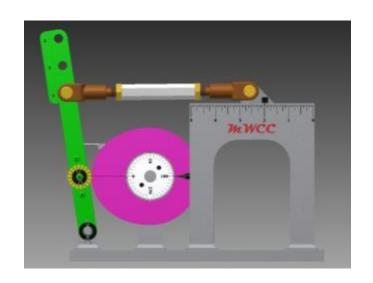
Stroke = (2-40/64") - 1-13/64" = 1-27/64"



#### Cam Follower on Pin B



At 0° angle (start position) Position = 61/64"



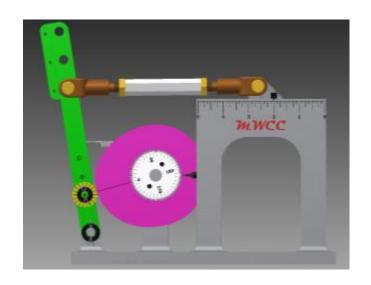
At  $180^{\circ}$  angle (end position) Position =  $1 - 62/64^{\circ}$ 

Stroke = (1-62/64") - 61/64" = 1-1/64"

#### Cam Follower on Pin A



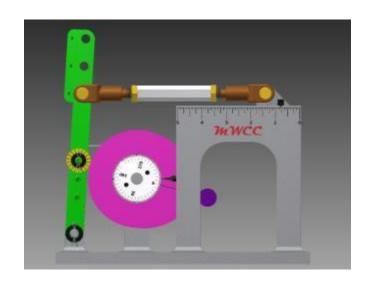
15.5° angle (start position) Position = 26/64"



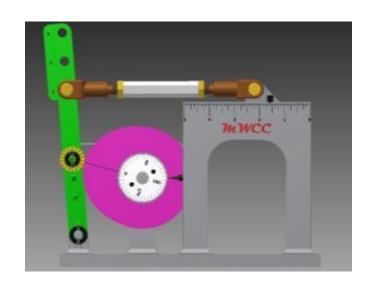
195.5° angle (end position) Position = 1 - 62/64"

Stroke = (1-62/64") - 26/64" = 1-36/64" = 1-9/16

#### Cam Follower on Pin C



345° angle (start position) Position = 50/64"



165° angle (end position) Position = 1 - 37/64"

Stroke = (1-37/64") - 50/64" = 51/64"

#### CAM LIFT AND DWELL

