

CUSTOMER INFORMATION

Name _____ Phone Number _____ Email _____

Vessel Name _____ Model _____ Length & Displacement _____

WHEEL CONFIGURATION

- Type of steering system CABLE HYDRAULIC GEARED
- Number of wheel turns, lock-to-lock _____
- Wheel Diameter _____
- Number of wheel spokes _____
- Spoke Diameter $\frac{3}{8}$ " $\frac{1}{2}$ " $\frac{3}{4}$ " Other: _____
- Wheel Features:
 - Tapered Spokes (spoke diameter varies)
 - Dished wheel/angled spokes (spokes not parallel with pedestal)
 - Wood rim or large rim (over 1" diameter). Rim dia: _____
 - Wood wheel: (see wood wheel worksheet)

Wood wheel ring inner diameter _____

Wood wheel ring outer diameter _____

CLEARANCES

- Distance from bottom of wheel to deck _____
- Distance between spokes and bulkhead surface
(5" out from center of wheel) _____
- Distance between spokes and nearest obstruction
1 $\frac{3}{8}$ " minimum* (Compass, engine levers, instrument pod, etc) _____
- Distance from wheel center to edge of surface where pilot will mount
(for bulkhead/pedestal or sidewall mount) _____
- Wood wheel measurements: (see wood wheel worksheet)
 - Distance between spoke flat and pedestal _____
 - Distance between wooden inner ring and pedestal _____

- Belt Size (See list at right) _____
Use template to position motor box and measure for belt

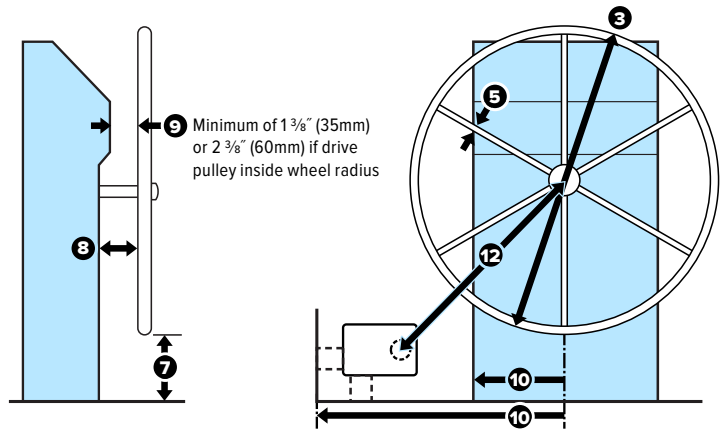
- Preferred motor box mounting option:
 - L-Bracket to Deck
 - L-Bracket to Sidewall NEXT TO WHEEL BELOW WHEEL
 - L-Bracket to Pedestal Side, drive pulley outside wheel radius
 NEXT TO WHEEL BELOW WHEEL
 - L-Bracket to Pedestal Side, drive pulley inside wheel radius

- Motor Box Orientation: HORIZONTAL VERTICAL
- Drive Pulley Faces: FORWARD (STANDARD) AFT (REVERSE)

CONTROL BOX MOUNTING

Check control box mounting location with a handheld compass for magnetic fields. The compass needle should not deflect near mounting location.

- Control box mounting method:
 - Guardrail Pipe — Diameter (thickness): 1" 1 $\frac{1}{8}$ " 1 $\frac{1}{4}$ "
 - Bulkhead Surface
 - Shelf/Console
 - Overhead/Pilothouse ceiling
 - Other: _____



BELT SIZES

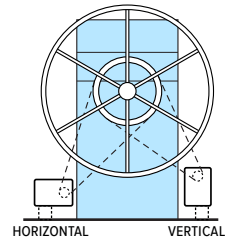
12 1/2"	318mm	17 7/8"	454mm	24 7/8"	632mm
13"	330mm	19 3/8"	492mm	25 3/8"	645mm
14 1/4"	362mm	20"	508mm	26 3/8"	670mm
15 1/4"	387mm	21 1/4"	540mm	27 1/2"	699mm
15 3/4"	400mm	21 7/8"	556mm	29 1/2"	749mm
16 3/8"	416mm	23 1/4"	591mm	38"	965mm
17 3/8"	441mm	23 1/2"	597mm		

Using the supplied template, measure the distance between the wheel and drive pulley centers then choose the closest belt size **12**

MOTOR BOX MOUNTING OPTIONS FOR L-BRACKET

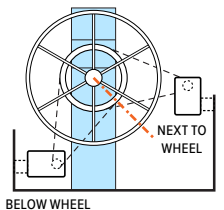
L-Bracket to Deck

- * Vertical can mount on either port or starboard side and pulley can face FORWARD or AFT
- * Horizontal port side, pulley must face FORWARD
- * Horizontal starboard side, pulley must face AFT



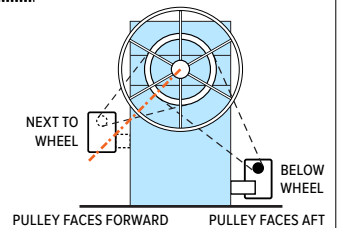
L-Bracket to Sidewall

- * Vertical on Starboard side, pulley must face FORWARD
- * Vertical on Port side, pulley must face AFT
- * Horizontal on Port side, pulley must face FORWARD
- * Horizontal on Starboard side, pulley must face AFT
- * Indicate whether motor box will be next to or below the wheel



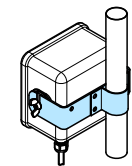
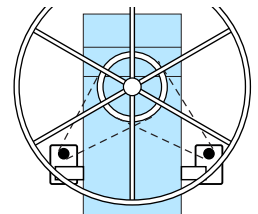
L-Bracket to Pedestal Side, drive pulley outside wheel radius

- * Vertical orientation only
- * Port side mount, pulley must face FORWARD
- * Starboard side mount, pulley must face AFT
- * Indicate whether motor box will be next to or below the wheel
- * Drive pulley must be at least 3/4" away from wheel rim

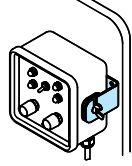


L-Bracket to Pedestal Side, drive pulley inside wheel radius

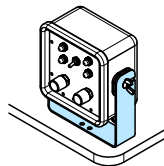
- * Vertical orientation only
- * Pulley faces AFT
- * Will mount on either port or starboard side
- * Drive pulley must be at least 3/4" from inside of wheel rim
- * Minimum distance needed is 2 3/8" (60mm) because drive pulley is inside wheel radius **9**



Guardrail Pipe



Bulkhead Surface



Shelf/Console

Mounting Worksheet for wooden wheels or wheels with wooden rim

MARCH 29, 2016

Wheel Diameter: _____

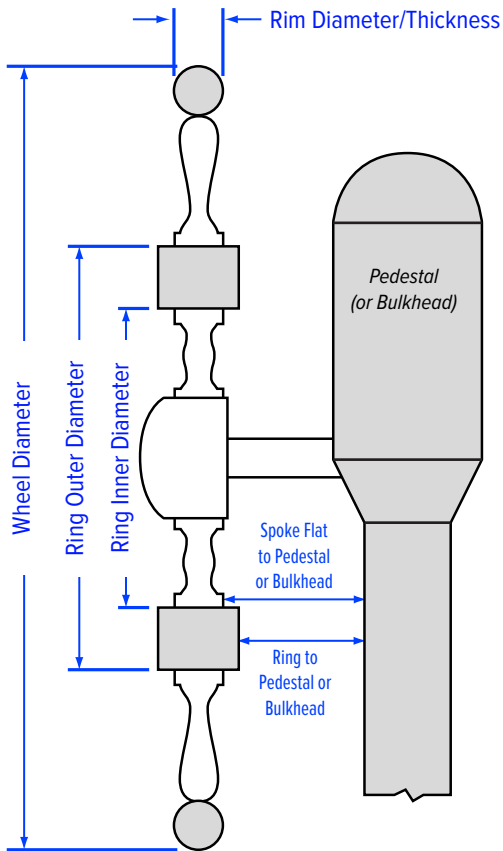
Rim Diameter/Thickness: _____

Ring Inner Diameter: _____

Ring Outer Diameter: _____

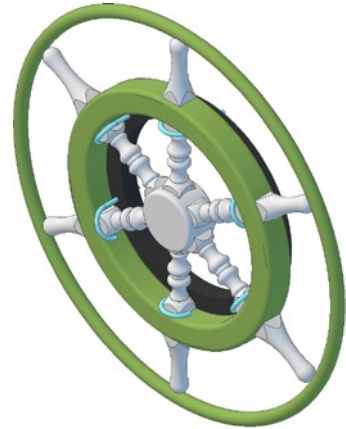
Spoke Flat to Pedestal or Bulkhead: _____

Ring to Pedestal or Bulkhead: _____

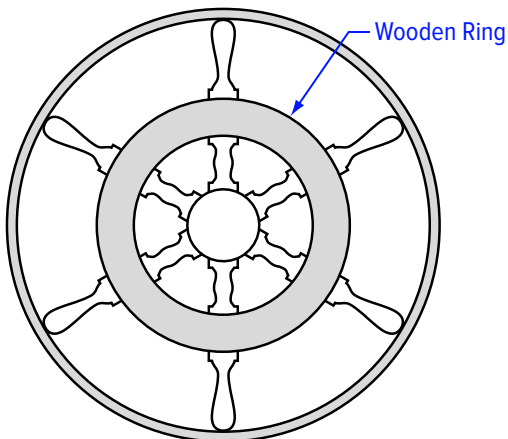
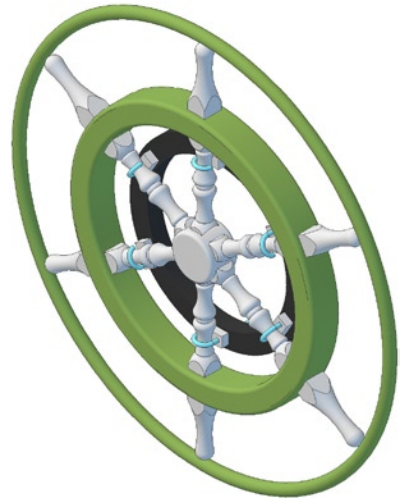


The wheel pulley attaches to the wheel spokes with J-bolts. If the wooden ring of the wheel is large enough, the wheel pulley will fit inside and rest directly on the spokes. Otherwise, the wheel pulley may rest on the ring itself and fasten directly to the ring with screws.

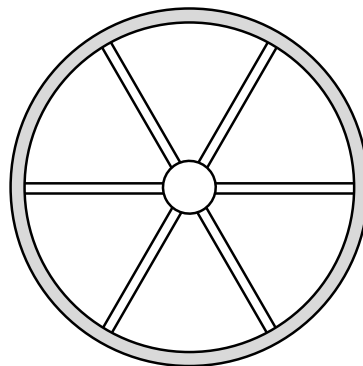
Wheel pulley rests on wooden ring



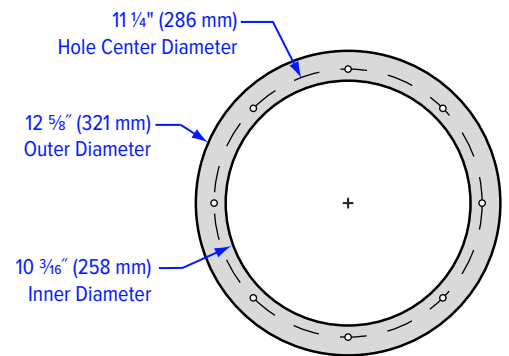
Wheel pulley fits inside wooden ring and rests on spokes. Spacers are needed to prevent the belt from chafing on the ring.



Wooden wheel



Stainless wheel with wooden rim



Wheel Pulley

L-Bracket Installation Template #1

Horizontal or Vertical Motor Box

MAY 18, 2017



831-687-0541
info@cptautopilot.com
www.cptautopilot.com

DIRECTIONS:

Print out this template life size and place in desired location. Measure the distance between the wheel center and drive pulley center.

NOTES:

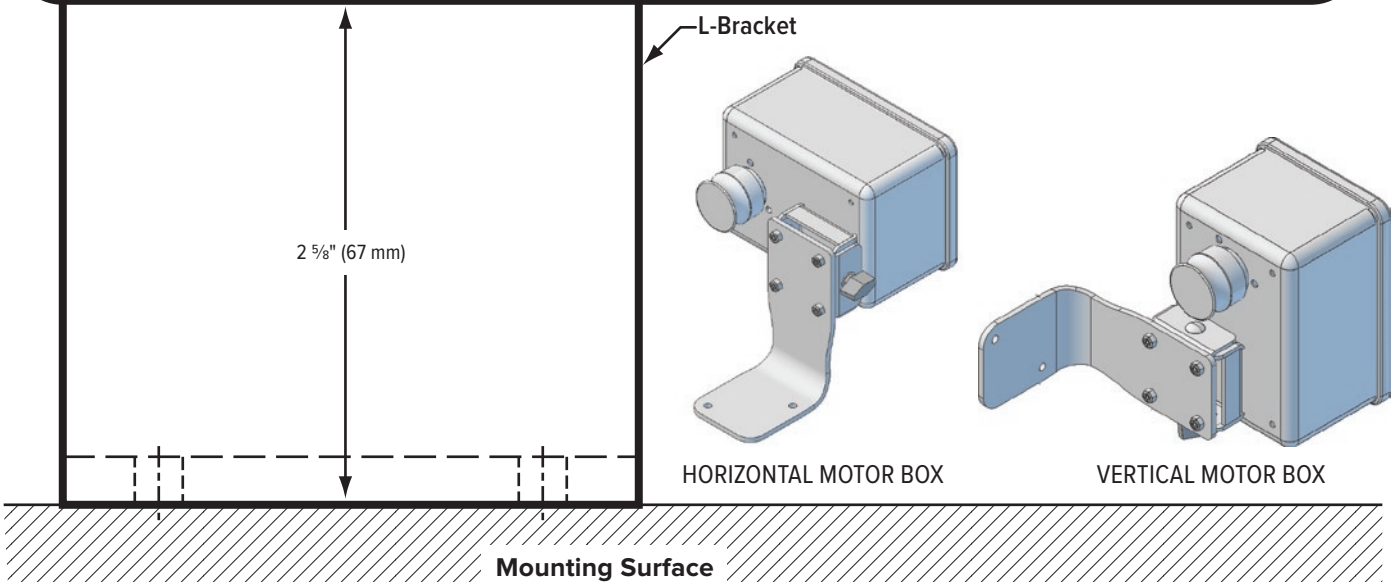
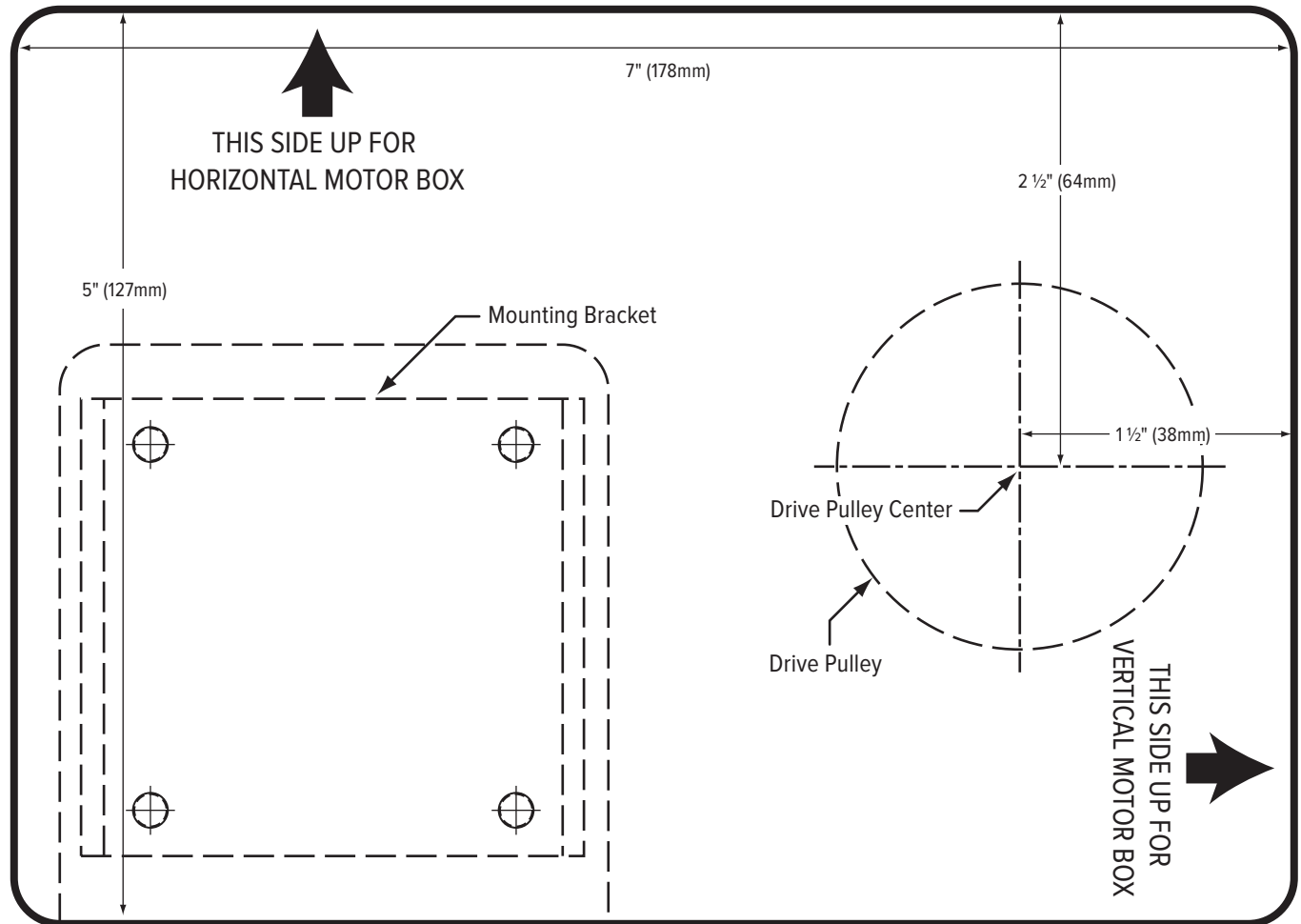
* **Face this template AFT for forward facing drive pulley (Standard motor rotation).**

- Leave at least 1" (25mm) of space between the motor box and the wheel rim

* **Face this template FORWARD for aft facing drive pulley (Reverse motor rotation).**

- Leave at least 1" (25mm) of space between the drive pulley and the wheel rim

* The mounting bracket for the slides up $\frac{3}{4}$ " (19mm) and down $\frac{3}{4}$ " to adjust for belt tension.



L-Bracket Installation Template #2 Vertical Motor Box Only

MAY 18, 2017



831-687-0541
info@cptautopilot.com
www.cptautopilot.com

DIRECTIONS:

Print out this template life size. Place the template in desired location. Measure the distance between the wheel center and drive pulley center.

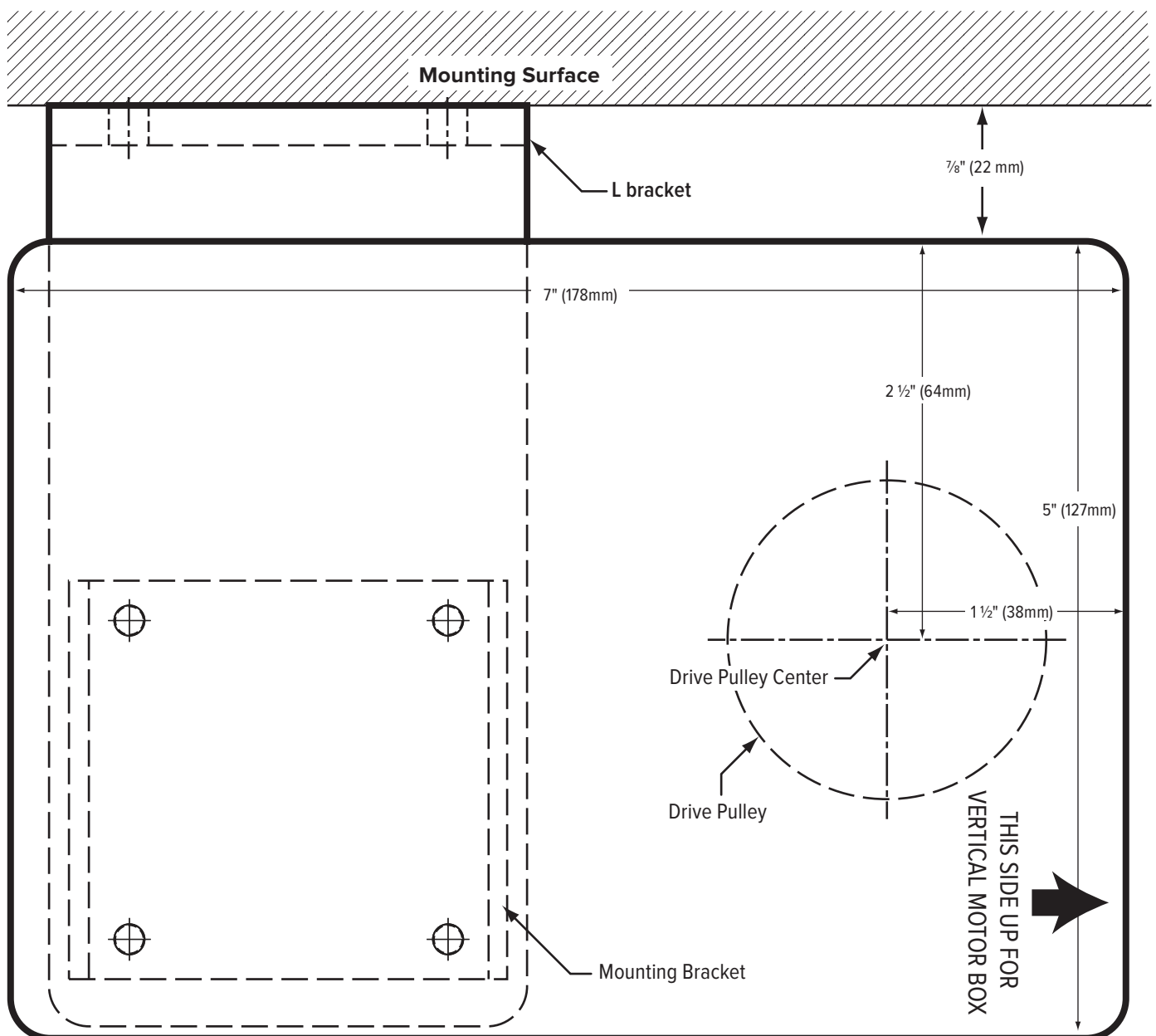
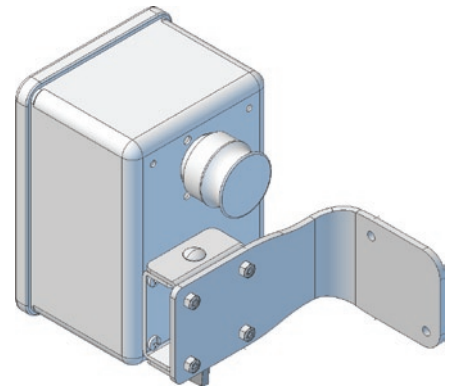
*** Face this template AFT for forward facing drive pulley (Standard motor rotation).**

- Leave at least 1" (25mm) of space between the motor box and the wheel rim

*** Face this template FORWARD for aft facing drive pulley (Reverse motor rotation).**

- Leave at least 1" (25mm) of space between the drive pulley and the wheel rim

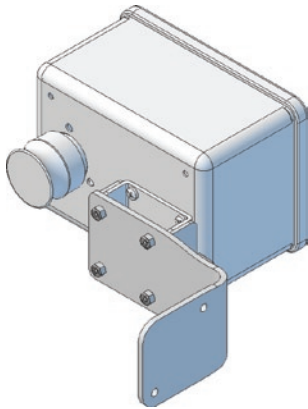
* The mounting bracket for the slides up $\frac{3}{4}$ " (19mm) and down $\frac{3}{4}$ " to adjust for belt tension.



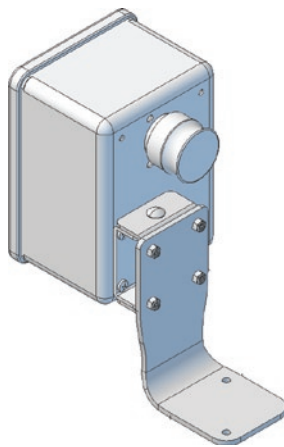
L-Bracket Installation Template #3

Horizontal or Vertical Motor Box

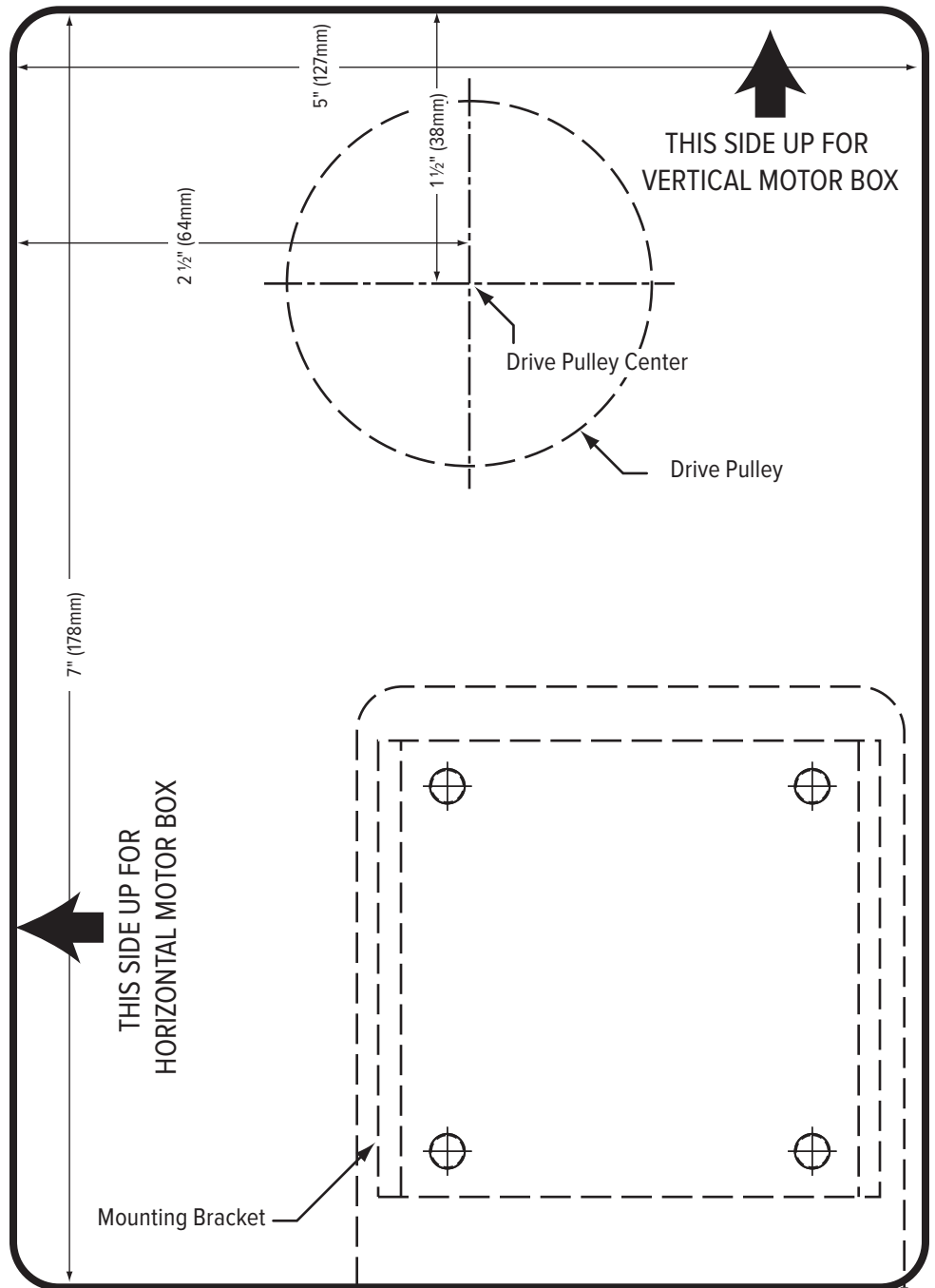
MAY 18, 2017



HORIZONTAL MOTOR BOX



VERTICAL MOTOR BOX



DIRECTIONS:

Print out this template life size. Place the template in desired location. Measure the distance between the wheel center and drive pulley center.

*** Face this template AFT for forward facing drive pulley (Standard motor rotation).**

- Leave at least 1" (25mm) of space between the motor box and the wheel rim

*** Face this template FORWARD for aft facing drive pulley (Reverse motor rotation).**

- Leave at least 1" (25mm) of space between the drive pulley and the wheel rim

* The mounting bracket for the slides up 3/4" (19mm) and down 3/4" to adjust for belt tension.



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