

Mounting Worksheet for Bulkhead or Flat Sided Pedestal Installation

JULY 1, 2016

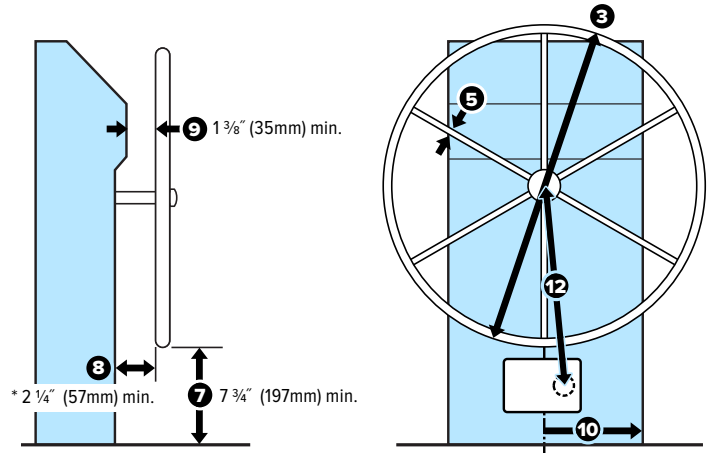
CUSTOMER INFORMATION

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

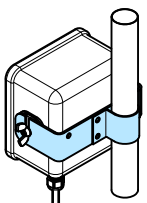
- Distance from bottom of wheel to deck _____
- Distance between spokes and bulkhead surface (where bracket will mount) _____
 $2 \frac{1}{4}$ " minimum (or $1 \frac{1}{2}$ " if drive pulley overhangs bulkhead edge)
- Distance between spokes and nearest obstruction _____
 $1 \frac{3}{8}$ " minimum* (Compass, engine levers, instrument pod, etc)
- Distance from wheel center to bulkhead edge (where autopilot will 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 cutout template to position motor box and measure for belt
- Preferred motor box mounting option:
 - Horizontal
 - Horizontal, Drive Pulley overhangs bulkhead edge
 - Vertical: NEXT TO WHEEL BELOW WHEEL

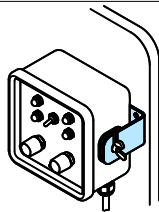
CONTROL BOX MOUNTING

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

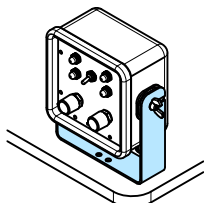
- Control box mounting method:
 - Guardrail Pipe — Diameter (thickness): 1" $1 \frac{1}{8}$ " $1 \frac{1}{4}$ "
 - Bulkhead Surface
 - Shelf/Console
 - Overhead/Pilothouse ceiling
 - Other: _____



Guardrail Pipe



Bulkhead Surface



Shelf/Console

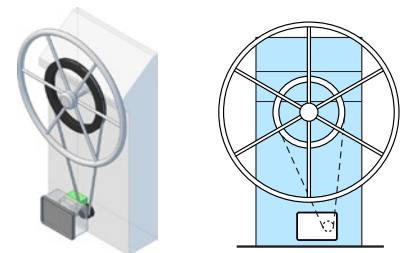
BELT SIZES

Using one of the supplied templates, measure the distance between the wheel and drive pulley centers then choose the closest belt size 12

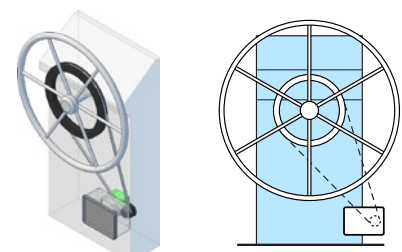
12 1/2"	318mm	21 1/4"	540mm
13"	330mm	21 7/8"	556mm
14 1/4"	362mm	23 1/4"	591mm
15 1/4"	387mm	23 1/2"	597mm
15 3/4"	400mm	24 7/8"	632mm
16 3/8"	416mm	25 3/8"	645mm
17 3/8"	441mm	26 3/8"	670mm
17 7/8"	454mm	27 1/2"	699mm
19 3/8"	492mm	29 1/2"	749mm
20"	508mm	38"	965mm

BULKHEAD / FLAT SIDED PEDESTAL MOUNTING OPTIONS

Horizontal Motor Box



Horizontal Motor Box Drive Pulley overhangs bulkhead edge

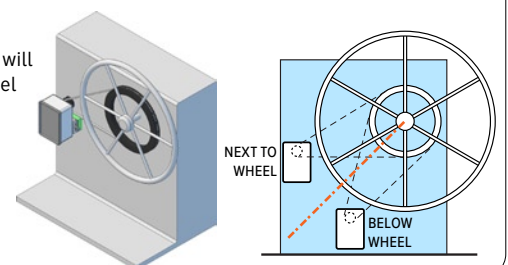


*Minimum distance needed is only $1 \frac{1}{2}$ " because drive pulley overhangs bulkhead edge 8

Vertical Motor Box

* Indicate whether motor box will be next to or below the wheel

* Will mount on either port or starboard side



Mounting Worksheet for wooden wheels or wheels with wooden rim

MARCH 29, 2016

Wheel Diameter: _____

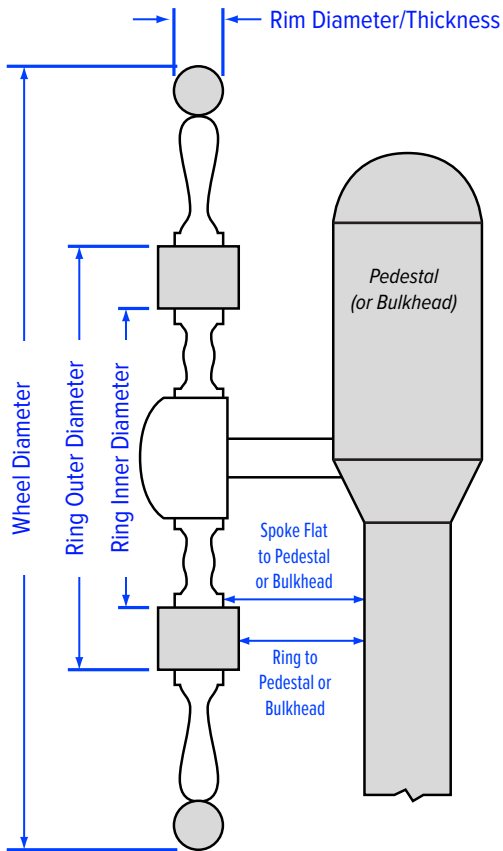
Rim Diameter/Thickness: _____

Ring Inner Diameter: _____

Ring Outer Diameter: _____

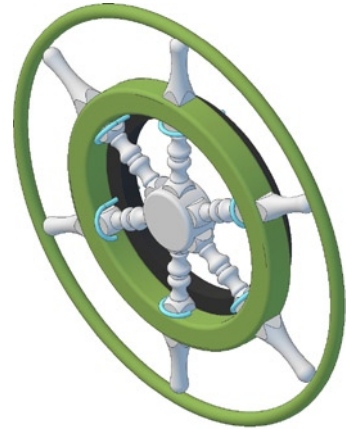
Spoke Flat to Pedestal or Bulkhead: _____

Ring to Pedestal or Bulkhead: _____

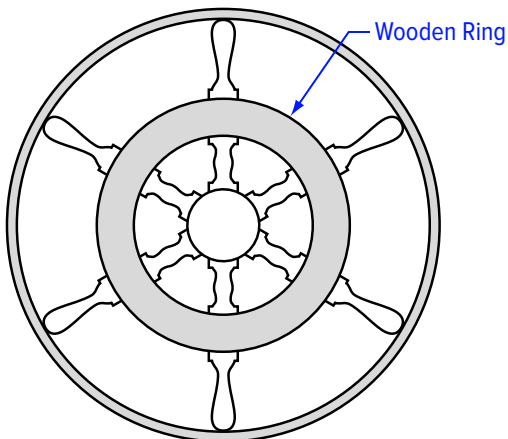
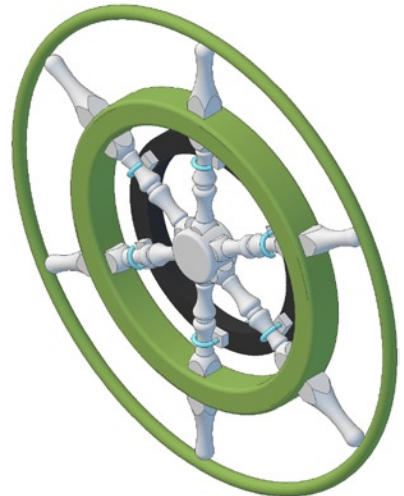


The wheel pulley attaches to the wheel spokes with J-bolts. If the wooden ring of the wheel is large enough, the wheel pulley will fit inside and rest directly on the spokes. Otherwise, the wheel pulley may rest on the ring itself and fasten directly to the ring with screws.

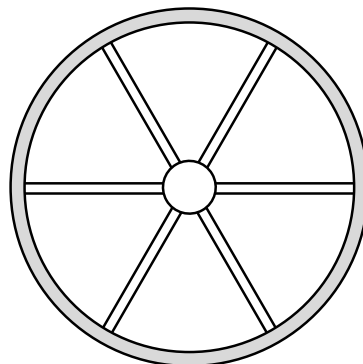
Wheel pulley rests on wooden ring



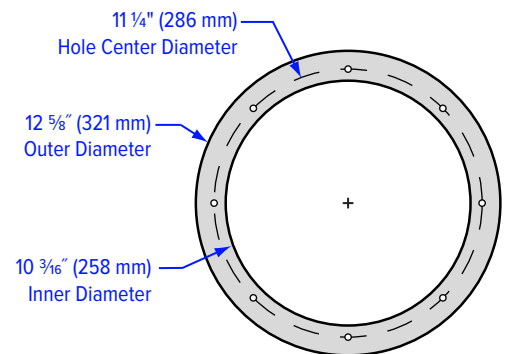
Wheel pulley fits inside wooden ring and rests on spokes. Spacers are needed to prevent the belt from chafing on the ring.



Wooden wheel



Stainless wheel with wooden rim



Wheel Pulley

Bulkhead Installation Template

Horizontal or Vertical Motor Box

APRIL 4, 2016

CPT 831-687-0541
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www.cptautopilot.com

DIRECTIONS:

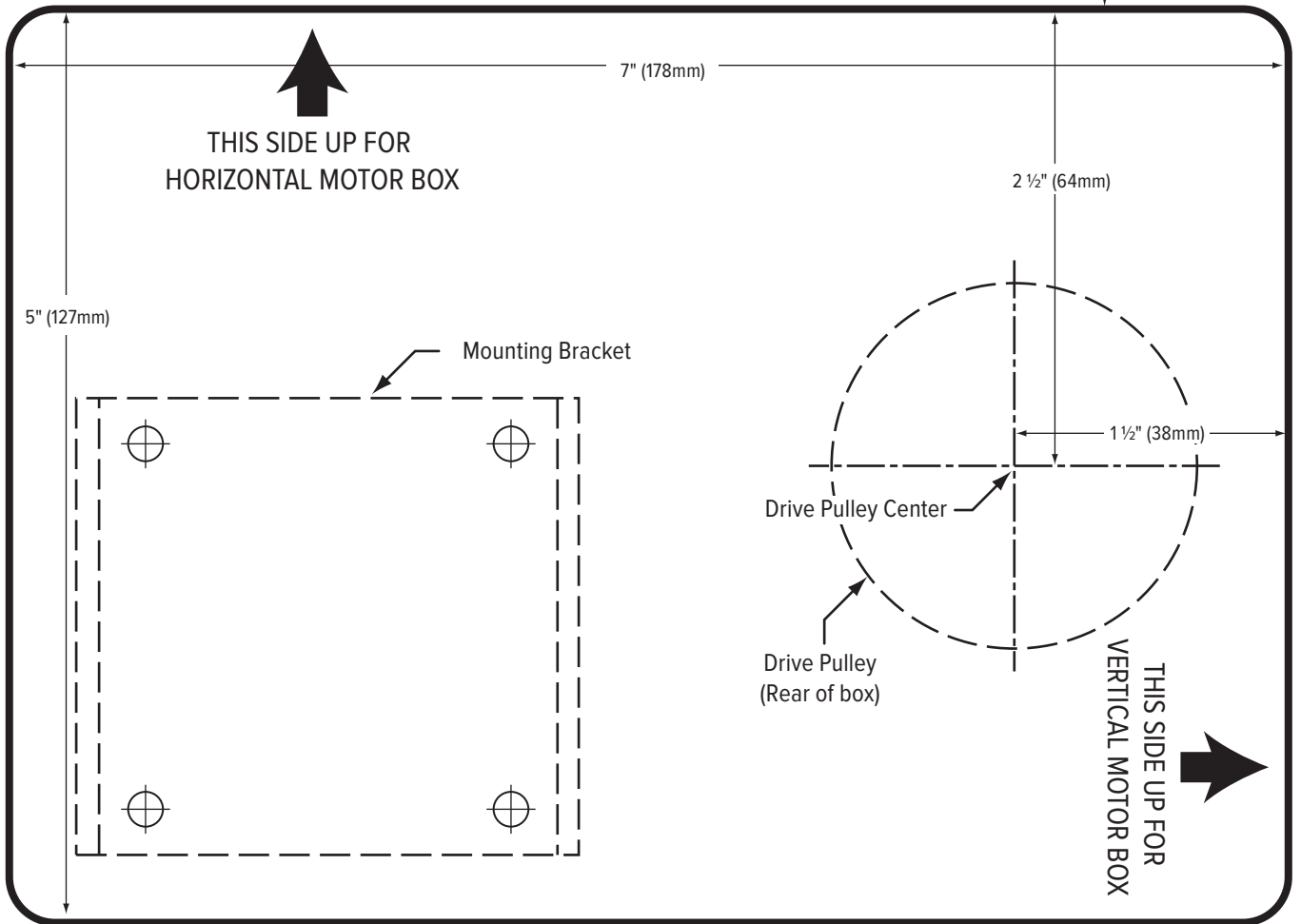
Cut out this template. Place the template on the bulkhead in desired location. Measure the distance between the wheel center and drive pulley center.

NOTE:

- Leave at least 1" (25mm) of space between the motor box top and the wheel rim
- Leave at least 2 3/4" (70mm) of space between the motor box bottom and the deck
- The mounting bracket for the slides up 3/4" (19mm) and down 3/4" to adjust for belt tension.



Minimum of 1" (25mm) clearance between top of motor box and bottom of wheel



Minimum of 2 3/4" (70mm) clearance between bottom of motor box and deck

