

**CMCP801DP Shaft Absolute  
Dual Probe Holder  
Assembly and Mounting Instructions**

Rev. A

May 8, 2018



## Model Description:

The CMCP801DP Dual Probe Holder is designed for the external mounting of proximity probes and velocity sensors when a Shaft Absolute measurement is required. External (through the case) mounting allows for the easy removal, inspection, and adjustment of the proximity probes gap as opposed to internal mounting where the bearing cap or cover needs to be removed prior to inspection. An internal ¼-28 UNF mounting plate provides the location for a velocity sensor. A housing extension is provided to allow room for a top entry velocity sensor and cable.

## Parts List and Description:

1 each GRU-75 Outlet Body	- Provides easy access for adjustment of proximity probe.
1 each CMCP801DP-B40	- 4.0" (102mm) Housing Extension with O-Rings
1 each CMCP801 Union	- 3/4" NPT Adapter w/internal thread for machine case mounting
1 each CMCP801 Adapter	- Allows for external probe calibration
1 each CMCP801 Stinger	- Proximity probe stinger. Can be cut to desired length
1 each Sensor Mounting Adapter	- Sensor Mounting Plate with ¼-28 UNF Threaded Hole
1 each Parker Seal	- Provides an oil tight seal
1 each ¾" Flat Washer	- Used between nut and Parker seal
1 each ¾" Jam Nut	- Lock adjustment

## Transducers:

### Probe Types: Page 4

The CMCP801DP Dual Probe Holder is machined to accept a standard 3/8"-24 standard and reverse mount proximity probes. A optional 1/4-28" to 3/8-24" mounting adapter is also available for 1/4"-28 UNF Probes. Each housing is provided with a velocity sensor mounting adapter which mounts at the end of the probe holder. The mounting adapter is threaded for ¼-28 UNF sensors.

## Mounting:

### Mounting Locations: Page 4

The CMCP801DP uses 3/4" NPT entry into the machine case standoffs, if required, can easily be constructed using readily available 3/4" pipe and pipe fittings. Care must be taken in drilling and tapping the bearing housing or cover to insure that the Eddy Probes will be perpendicular to the shaft center line.

## Assembly:

### Assembly Drawing: Page 4

The CMCP801DP comes from the factory without a proximity probe installed. Care must be taken to not damage the proximity probe. Loctite 242 Medium Strength must be used on the parts showed on the assembly drawing.

1. Assemble the CMCP801 housing as drawn on page 5.
2. Run the Proximity Probe cable through the Stinger and out of the slot in the adapter.
3. Use Loctite 242 Medium Strength Thread Locker on between Stinger and Adapter threads.
4. Install the velocity sensor mounting plate at the top of the adapter, tighten set screw to ensure no movement.
5. Install velocity sensor on mounting plate and connect cable.

## Adjusting:

The CMCP801DP Dual Probe Holder has an adjustment range of plus or minus 1" (2.54 cm) or 2" (5.08 cm) overall adjustment for the proximity probe. The internal adapter can be adjusted internally to gap the proximity probe. Use the Parker Seal, washer and nut will ensure a tight leak free fit.

1. Remove Conduit Head
2. Loosen  $\frac{3}{4}$ " nut.
3. Use Wrench Flats on Adapter to adjust proximity probe gap
4. Tighten nut when complete.
5. Check adjustment and readjust as required.

*See Proximity Probe Manual for probe gap requirements*

## Insertion Depth Calculation:

To determine how much to trim the stinger for your required insertion depth, measure your insertion depth by measuring from the surface of the machine to the shaft surface. Subtract your required insertion depth from the stock standard depth of 12". Trim this result from the stingers probe end and tap with a  $\frac{3}{8}$ "x24 UNF Tap.

12.00" – Standard Insertion Depth  
- XX.XX" – Subtract Required Insertion Depth  
XX.XX" – Amount to trim from Stinger

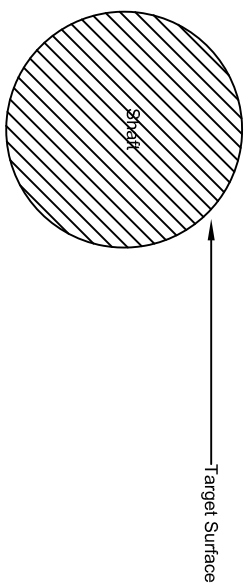
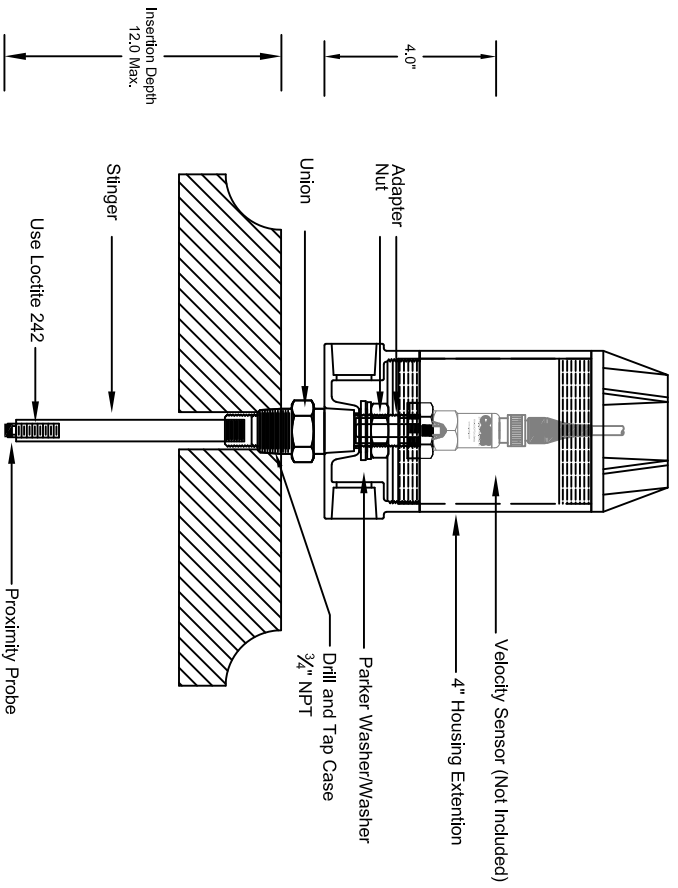
## Ordering:

The CMCP-801 Probe Holder is available in various lengths and has an adjustment ordering, the insertion depth should be measured, or calculated, and the closest standard length selected. **See Insertion Depth Calculation.** The broad adjustment range will allow for any discrepancies. In some cases Probe Holders are ordered in their longest length and cut in the field when the machine is open and available for measurements.

### **CMCP801DP**

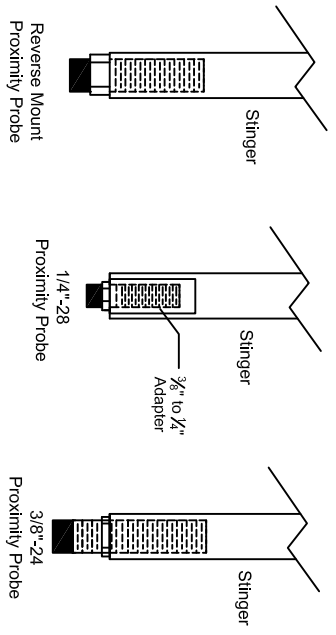
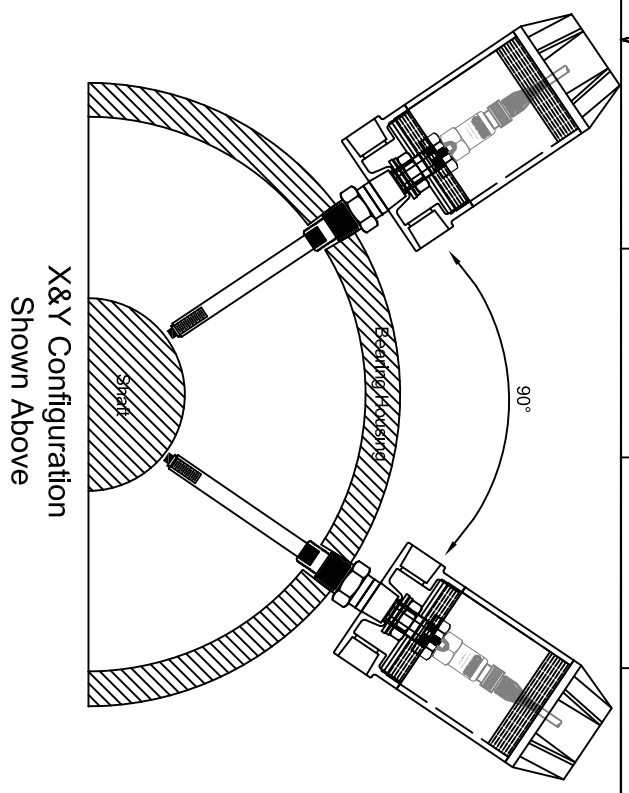
- 01  $\frac{3}{8}$ "-24 UNF Probe Body
- 02  $\frac{1}{4}$ " -28 UNF Probe Body

All CMCP801DP's are stocked with a 10.625" Stinger which provides a 12.0" maximum insertion depth. Please call your sales representative for custom length pricing. Additional lengths can be obtained by using longer proximity probes.



**Insertion Depth Calculation:**  
 12.00" Base Length w/ Probe  
 -xx.xx" Insertion Depth  
 xx.xx" Cut off Amount

10.625" Base Slinger Length  
 -xx.xxx" Cut off Amount  
 xx.xx" Final Slinger (Only) Length



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REV.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

<b>CUSTOMER:</b>		<b>STI Vibration Monitoring</b>	
LOCATION NO.		League City, Texas	
SR. NO.		CWCPR801DP Installation	
UNLESS OTHERWISE SPECIFIED		DATE: 09/2018	
ALL DIMENSIONS ARE IN INCHES		DRAWN BY: STI	
FRACTIONS: XX.X / 16		CHECKED BY: STI	
DECIMALS: XX.XX		DATE: 09/2018	
ANGLES: X.XX		SCALE: None	
UNITS: INCHES		SHEET: 1 OF 1	
STI: 5100 S. 100th Ave. Houston, TX 77056		STI: 5100 S. 100th Ave. Houston, TX 77056	