

How to calibrate a spiral out of chain warning.

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Sensor Adjustment Instructions

To properly align the proximity sensor:

Start by rotating the sensor clockwise.

Observe the green marker on the live trend graph:

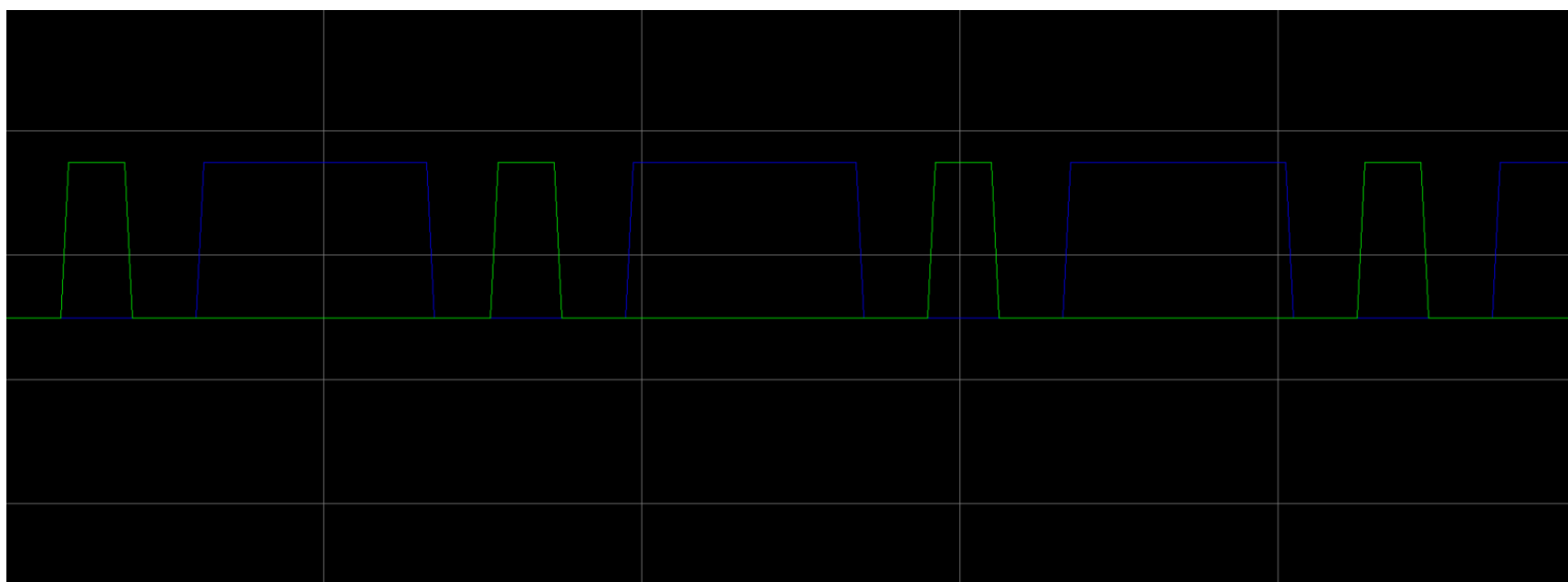
If the green marker moves to the right, and the sensor is shifting away from the center .

In that case, try rotating the sensor anticlockwise instead.

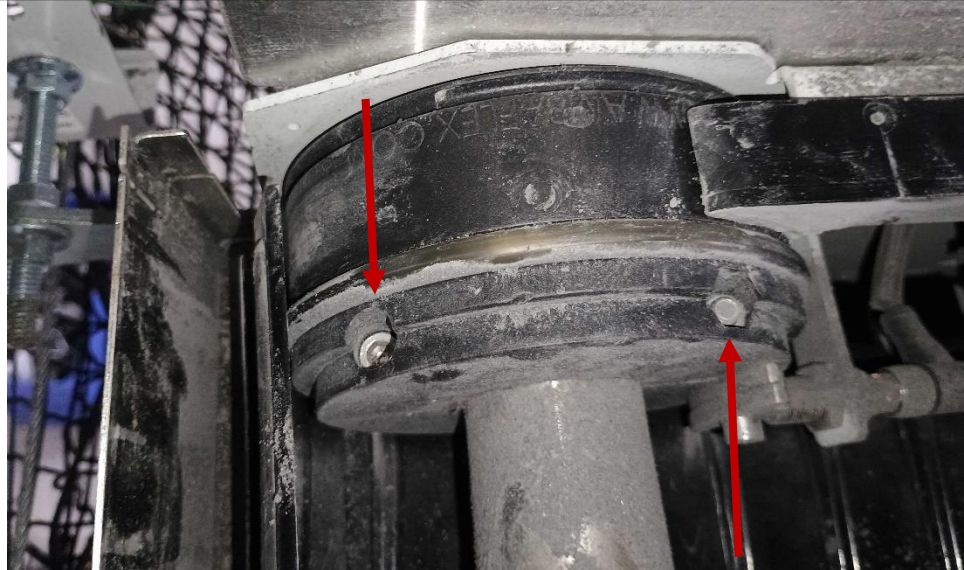
Your goal is to align the green marker in between the two blue markers, which indicates optimal sensor alignment.

Continue fine-tuning the rotation until the green signal consistently stays centered between the blue edges.

This ensures the object is detected at the correct point during its travel.



Mark bearing cover against shaft as shown in the other photos. Using 2 different color markers will help you know if 180° shift was made or less. The marker and half moon can be adjusted by loosening both bolts. They are 180° apart. Remove 5 slats, skip one, remove 5 more slats to have a big enough window. Make sure maintenance window is closed before jogging.



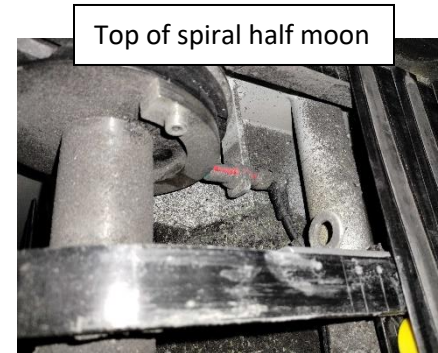
Rotate forward or reverse to gain access



Top of spiral half moon



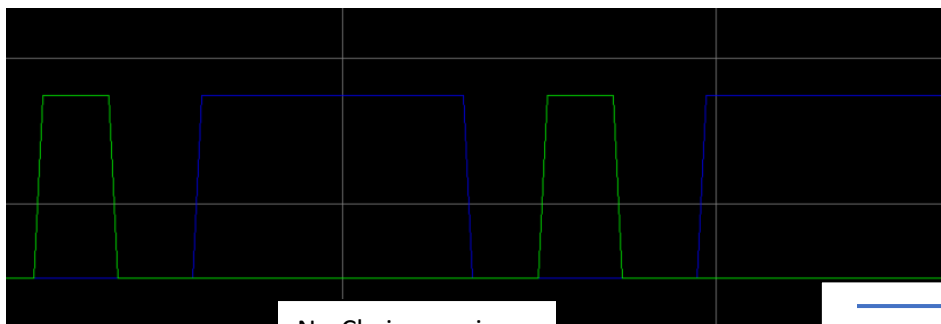
Bottom of spiral marker



Top of spiral half moon

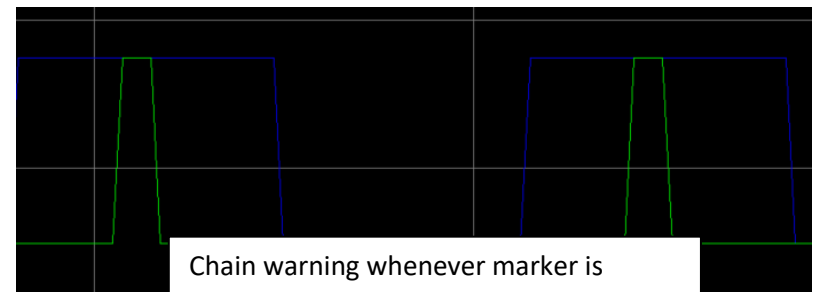


Bottom of spiral marker



No-Chain warning

— Half moon
— "Marker"

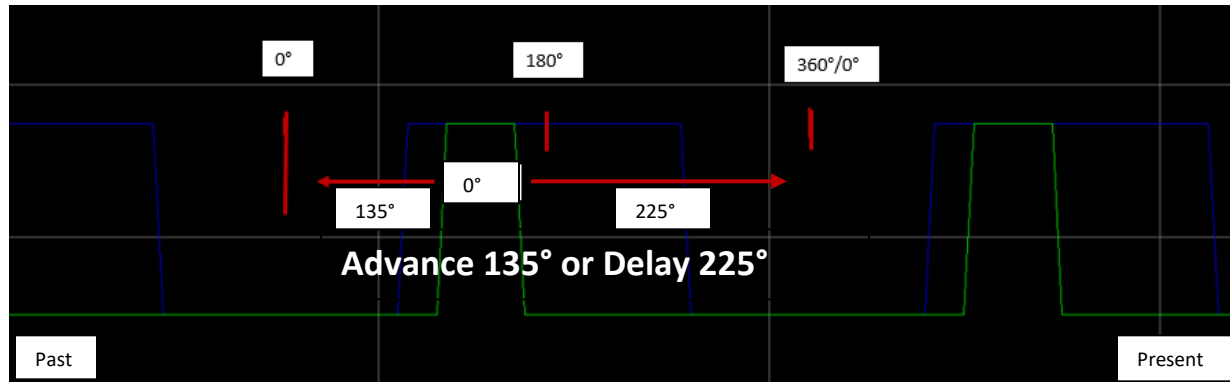


Chain warning whenever marker is flagged at the same time as half-moon.

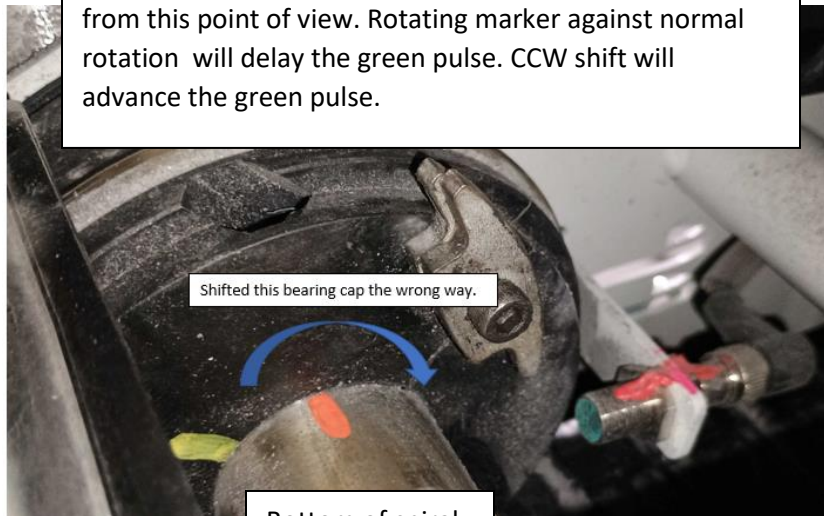
Adjust when slack is minimal!

This will graph change when link is removed, obtain new graph

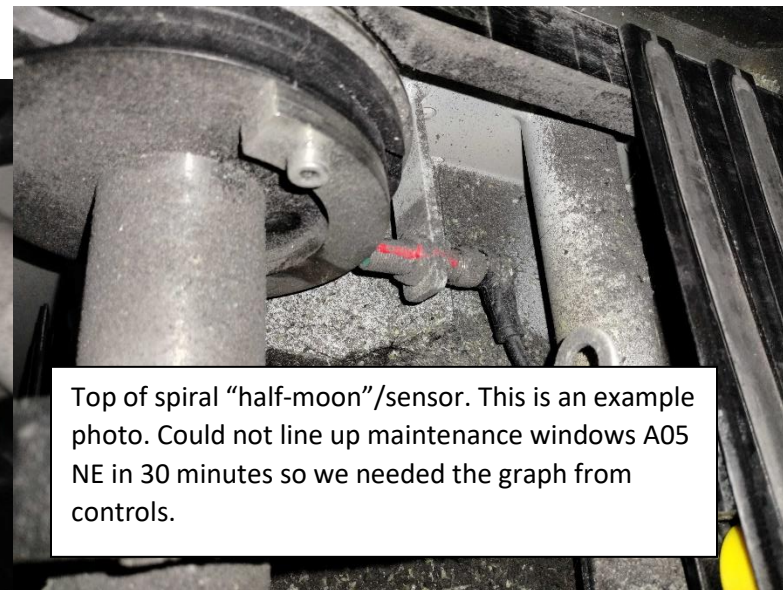
Green pulse should ideally be between 2 blue pulses. The blue pulse represents the half moon at the top of the spiral. The green pulse represents the smaller marker. I do not have exact angle/degree measurements but used best judgment. When using graphs to make adjustments on the bottom marker, it does not matter what orientation the half moon is. Just make a reference on the marker cover as shown in photos, and then shift the cover. **You will not fault the spiral if a mistake is made, just make sure parts are secured.**

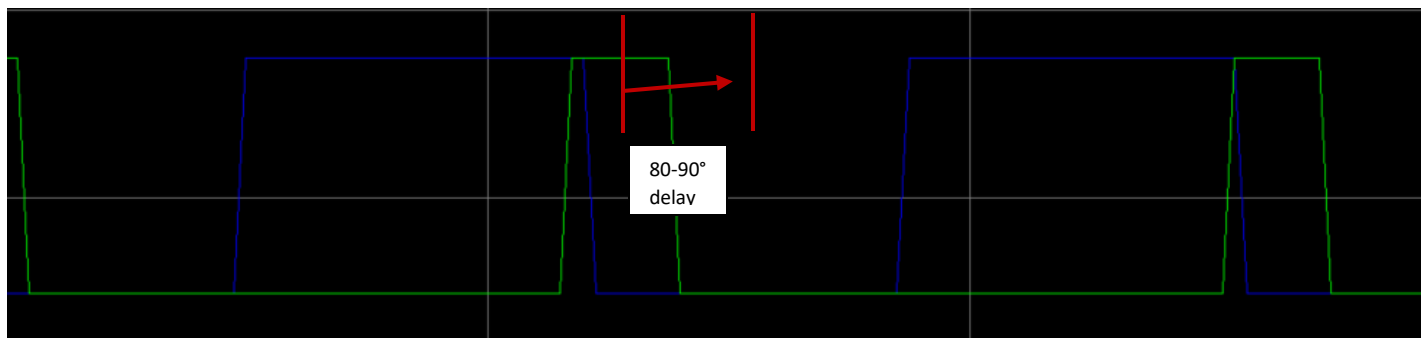


Example: Shaft is normally rotating counter clockwise from this point of view. Rotating marker against normal rotation will delay the green pulse. CCW shift will advance the green pulse.



Bottom of spiral marker/sensor





Rotating the cover 135° clockwise on 12/26 delayed the green pulse but did not clear the chain warning. Rotating the cover counter clockwise at the discharge end would have advanced the green pulse and centered the green pulse as shown later in this document

Rotating 180° would have cleared the warning, but it would not have been center between the blue pulses.

I got the opportunity to correct the mistake the next day



Delayed by 135 was a mistake,



Delayed the marker another 80-90° to get to the same position I wanted originally. $135 + 90 = 225$ as shown in first graph.

After the correction:

