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**Title: Dickey John Encoder Mounting Update** 

Product Line: Planter Attachments Model: Dickey John Encoder

**Level: Public** 

Author(s):Bo Downing Revision Letter: N/A



Overview: Update for issues breaking at the ¼" threads with the Dickey John Encoder. We have added parts and a solution to allowing flexing.

**Links to Supporting Info:** 

396-6396Y1 Hydraulic Seed Drive Kit

## **Solution:**

1. This is about the mounting of the Encoder on the Seed Drive Kits (Kit 815-00-100100, instructions 396-6396Y1)

Before October 2024 we have had a number of the 229-03-467092221 ---[Dickey John 360 pulse/rev encoder coupler - adapts from encoder to 1/4" male bolt thread] parts break at the ¼" thread that screws into the end of the motor shaft. This is due to motor shaft and the encoder shaft being slightly out of alignment and the many rotations of this pair while in use and having the encoder being too rigidly fixed to the motor mount causing the small \( \frac{1}{2} \) threads to flex over and over until they fatigue and break. There are two changes to help this problem, First we made the threads of the coupler adapter (299-03-467092221 shorter (now is 0.65" long). This will allow it to thread all the way into the shaft and bear against the end of the motor shaft so the thin threads will no longer be able to flex. Second we shortened the mounting bracket that holds the dickey john encoder and we added an O-ring to the kit. The instructions now show that you bolt the encoder mount to the motor mount with the O-Ring on the ¼" bolt and the Oring between the two brackets. The instructions spell out that this mounting bolts should be tightened very loosely. Just engage the nylon of the nylock nut so the bolt won't fall out. The idea is that this bolt is only keeping the encoder from spinning but the encoder is otherwise free to wiggle up, down, left, right, in, and out.

This is highlighted in the manual in Step 5.

## Sprockets and Encoder Installation

- Attach Idler Sprocket using 1/2" x 3" Bolt, spacers, washers, and 1/2" Nut as shown. Note: Depending on bracket orientation the idler sprocket will always be in the vertical slot
- Install 12 Tooth Drive sprocket to hydraulic motor shaft making sure to line it up with the idler sprocket. Then tighten set screw.
- Attach Encoder Bracket to the encoder using Self tapping screws making sure not to over tighten them.
- Thread Encoder adapter into the hydraulic motor shaft until it is hand tight.
- To mount the encoder Insert the encoder shaft into the adapter. Then using 1/4" x 1" Bolt and nut and rubber o-ring, attach encoder Bracket to the main bracket. O-ring will be between encoder bracket and main bracket. 1/4" should be very loose only tighten til lock nuts nylon ring has engaged. O-ring will be barely squashed.
- Then tighten the set screw on the encoder adapter to engage the flat portion of the encoder with the set screws. Adjust encoder to ensure alignment with gear shaft as set screws are tightened.



