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HydraFiber[®] Processing Unit Technical Bulletin: Fiber Drive Chain Conversion

Document Description: TSB- Fiber Drive Chain Conversion

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Product: AgriNomix HydraFiber® Processing Unit

RE: Fiber conveyor drive belt premature wear

Solution: Replace cog belt with chain

Parts Required: Yes

As some HydraFiber® Processing Units have been infected by premature wear of the fiber bale conveyor drive belt, AgriNomix has issued a procedure to eliminate issues concerning this assembly. Should this cog belt display signs of early wear or failure, it is recommended that the belt and associated pulleys be replaced with a chain and sprockets. Below is the procedure for replacement.

1. To gain access, open right-front upper door and remove right-rear upper guard. **See Figure 1.**

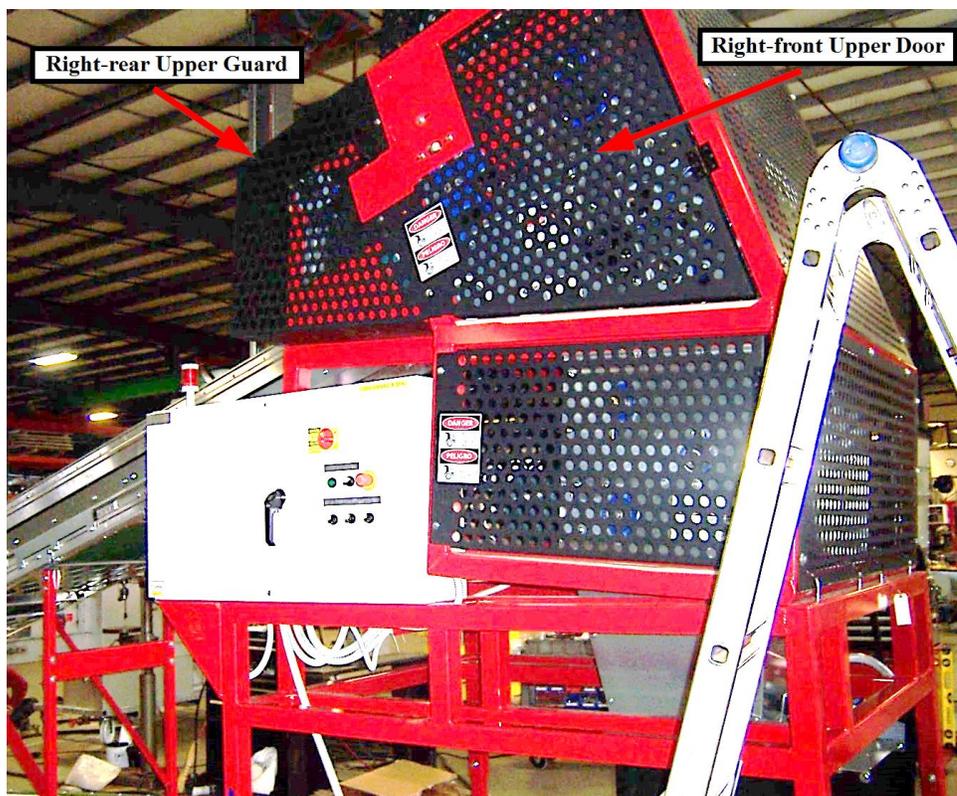


Figure 1

2. Remove the pinch roller belt from the pinch roller. Do not remove it from the motor shaft. Simply allow it to hang from the shaft. See Figure 2.

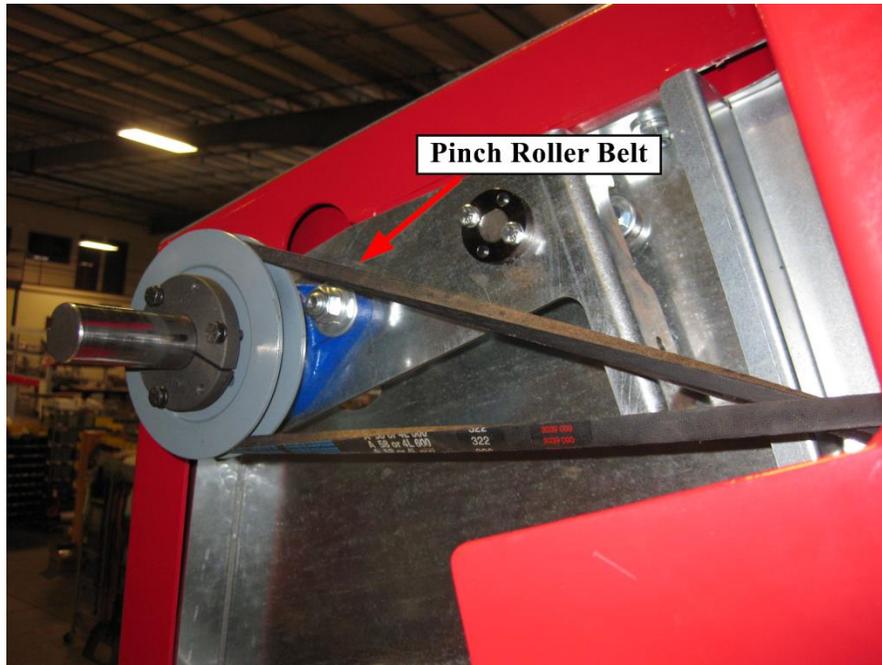


Figure 2

3. Remove conveyor timing gear pulley and taper-lock bushing from conveyor shaft. Place gear aside. Retain bushing and hardware. See Figure 4.

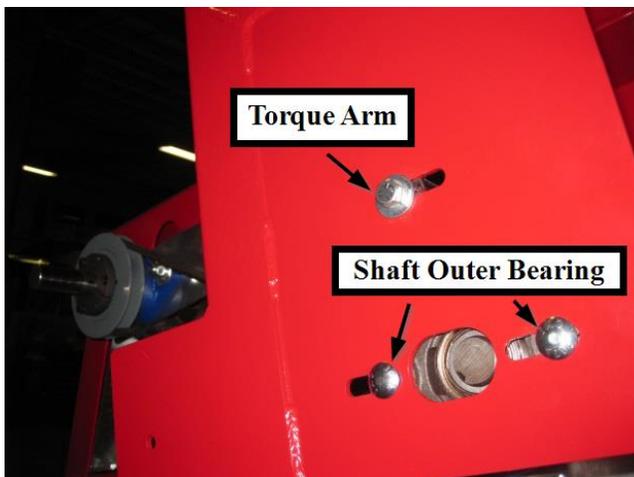


Figure 3

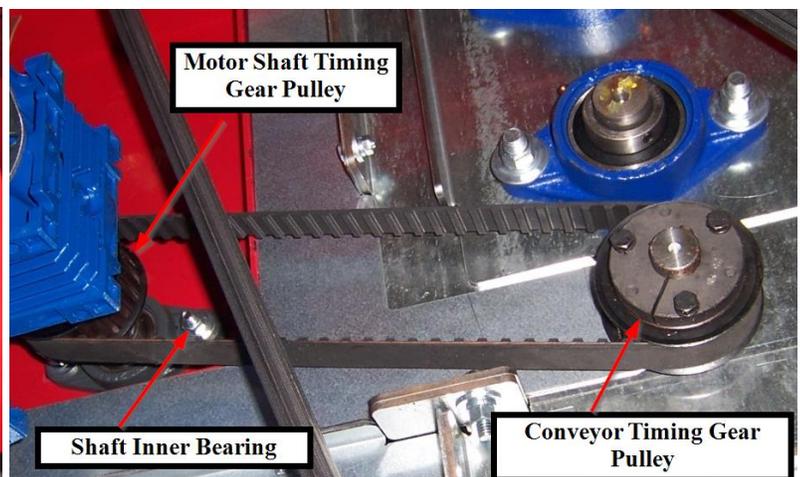


Figure 4

4. Loosen the three bolts retaining shaft outer bearing and torque arm. Loosen two bolts retaining shaft inner bearing. Loosen shaft inner bearing collar set-screw. See Figures 3 & 4.

5. Remove bearing and torque arm nuts. Slide on the shaft, inner bearing away from frame. Lower motor/gearbox assembly down as a unit. Place belt aside. **Note:** Use care when moving inner bearing. The carriage bolts will not be retained and can easily fall into the machine.
6. Remove motor shaft timing gear pulley and taper-lock bushing from shaft. Place gear aside. Retain bushing and hardware. **See Figure 4.**
7. Utilizing existing taper-lock bushing, install chain sprocket onto the motor shaft. **DO NOT** fully tighten taper-lock. **See Figure 5.** **Note:** Both sprockets provided are identical. **Note:** The bushing will be installed first and then the sprocket. The installation orientation of the new components will mirror that of the superseded components.

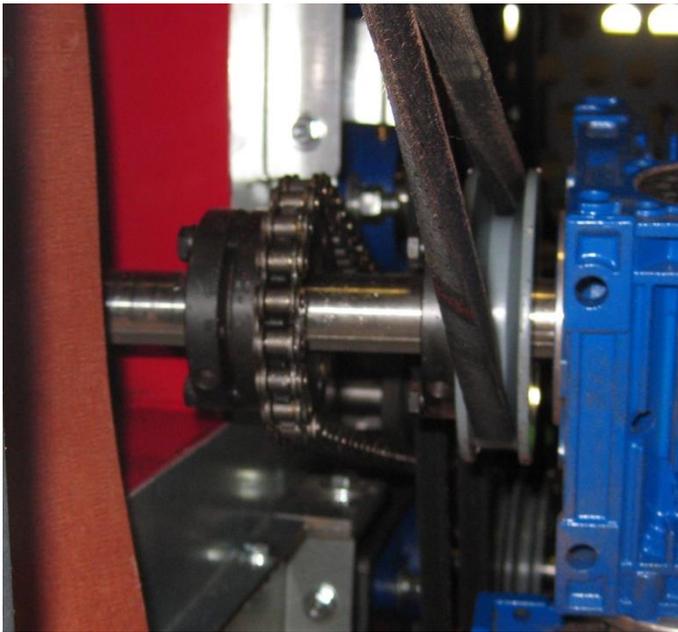


Figure 5

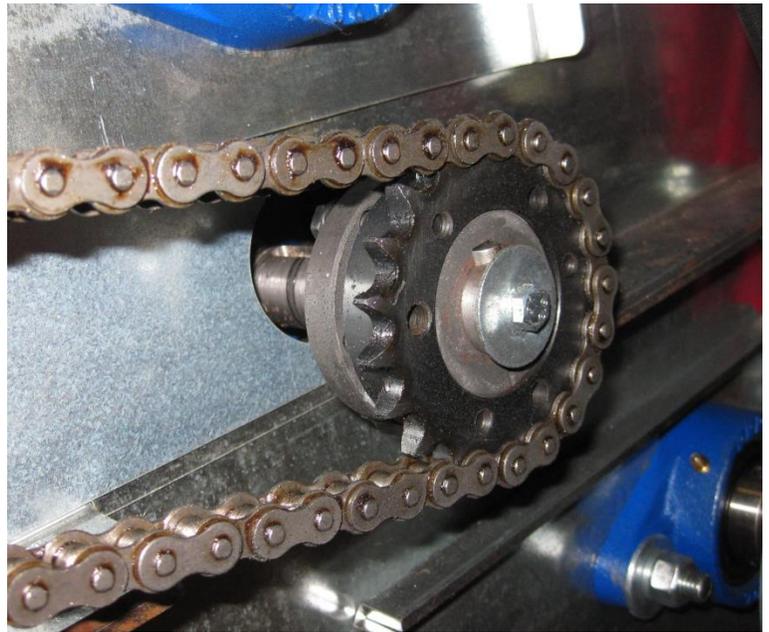


Figure 6

8. Utilizing existing taper-lock bushing, install chain sprocket onto conveyor shaft. **DO NOT** fully tighten taper-lock. **See Figure 6.** **Note:** The sprocket will be installed first and then the bushing. The installation orientation of the new components will mirror that of the superseded components.
9. Re-install motor/gearbox assembly and lightly snug all bolts.
10. Roughly align the chain sprockets. Install new chain and master link.
11. Adjust and line-up sprockets and tighten the taper-lock bushings. **Note:** In an alternating pattern, tighten bushing hardware in two steps. First step- 45 in./lbs. and the second step- 90 in./lbs.
12. Set chain tension. Securely tighten motor/gearbox assembly. **See Figure 7.**

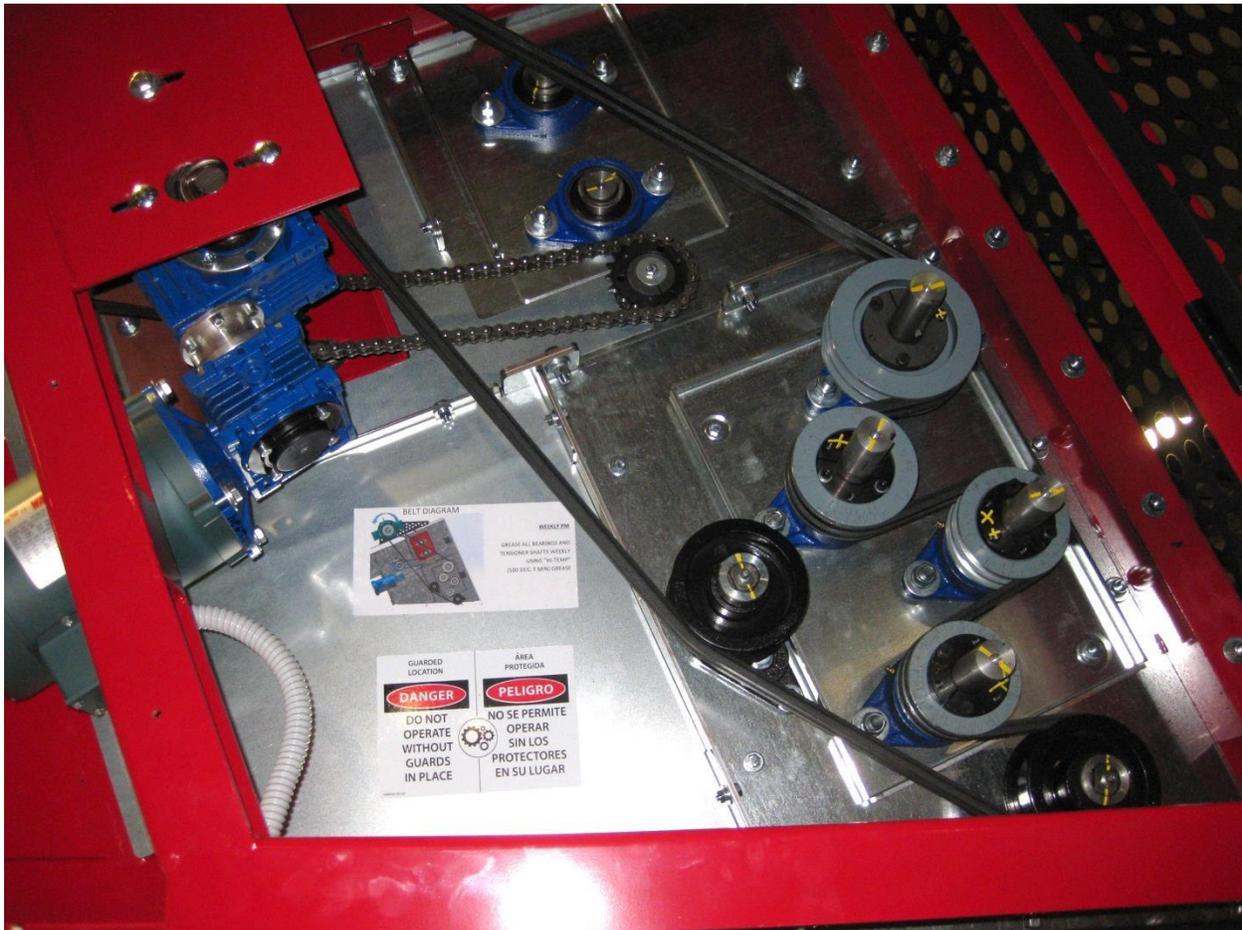


Figure 7

13. Re-install pinch roller belt.
14. Install right-rear upper guard and close right-front upper door. Install and securely tighten all door hardware.
15. Discard cog belt and timing gears.

TSB Replacement Components Include:

Qty.	Part Number	Description
1	6261K193	#40 Master Link
79	6261K173.10	#40 Steel Chain Links
2	40SH20	Chain Sprocket