

Replacing the main drive belt on a Farm Aid Equipment 250/340/430

## Background

The mixer is protected from too much torque being applied to it by a drive belt. The belt operates like a fuse in the system to prevent too much torque from damaging the mixer. Over time the belt may wear out and require replacement.

The method of replacing the drive belt is not obvious. Please follow this step by step to avoid unnecessary work.

## Note: All bearing are aligned before final tightening in the factory. To maximize the life of your drive system reinstall the bearing as they were before the task was begun

1) Remove the belt tensioner. (note: a 540 rpm left hand discharge is shown, a right hand discharge has the bent tensioner on the underside of the belt). One bolt in the center. On a 1000 rpm machine the tensioner will have an adapter to lengthen it's reach.



- 2) On the back bearing that supports the shaft for the pulley that is **not** connected to the PTO:
  - a. Find and remove the master link in the number 60 chain that also runs on this shaft.
  - b. Mark the location of the bearing right to left on the machine.
  - c. Remove the two bolts that hold the bearing to mixer.
  - d. Roll the belt off both pulleys
  - e. Manipulate the belt under the bearing to free it from this shaft.



- 3) Open the shield on the auger side. On the shaft that is connected to the PTO shaft:
  - a. Find and remove the master link on the number 60 chain that runs on this shaft.
  - b. Mark the location of the back bearing, right to left on the machine.
  - c. Remove the two bolts that hold the back bearing to mixer.



4) Using a bar, pry up on the sprocket and to raise the bearing up enough to thread the old belt out from under the bearing and repeat to install the new belt.



- 5) Reinstall bolts in bearing housing after lining up the marks made in step 3. Reinstall master link and tighten chain so that it has 1.5" of play in the side without the tensioner on it.
- 6) Reinstall bolts in bearing housing after lining up the marks made in step 2. Reinstall master link and tighten chain so that it has 1.0" of play in the side without the tensioner on it.
- Roll belt on to pulley and reinstall belt tensioner. The belt should be easy to move <sup>1</sup>/<sub>2</sub> inch on the side without the tension.