

AERATOR MAINTENANCE

Before performing maintenance on any unit, always disconnect and ground spark plug wire.

A. Tine Reel Removal/Tine Row Replacement

1. Remove the top guard.
2. Loosen idler sprocket bolt and release tension on the chain.
3. Loosen the four bearing mount bolts enough so they can be removed by hand. Then while holding the reel remove the bolts one side at a time.
Caution: The tine reel is heavy and has lots of sharp edges.
4. Once the bolts are removed lift the reel up and to the side to remove it from the drive chain and from the unit. **Note:** Observe the positioning of the tine rows for reassembly.
5. Remove bearing from shaft and remove shaft jam nut (Item 71), lock washer (Item 70), spacer (Item 69), and spacer (Item 66).
6. Remove tine rows and spacers as needed to replace damaged or worn parts.
7. Once parts have been replaced, reinstall tine rows and spacers in the exact order they were removed.
8. Reinstall spacer (Item 66), spacer (Item 69), lock washer (Item 70) and jam nut.
9. Torque nut to a minimum of 100 ft lbs.
10. Check that all of the rows are tight by attempting to move them by hand.
11. Reinstall tine reel on to chain and install bearing on shaft.
12. Lift sprocket end of tine reel and install mount bolts. Then lift other side and install mount bolts. Tighten all four bolts securely.
13. Tension the chain by sliding the idler to the rear of the unit and tighten the idler sprocket bolt. **Note:** Over tensioning the chain will cause premature wear of the chain and sprockets. A properly tensioned chain will have $\frac{1}{4}$ to $\frac{3}{8}$ inch of slack when moved by hand.
14. Reinstall guard.

B. Individual Tine Replacement

1. Loosen but do not remove the outermost nut and carriage bolt that secures the damaged or worn tine.
2. Loosen and remove the innermost nut and carriage bolt that holds the tine in the reel.
3. Use a small pry bar and separate tine plates enough to slide out the tine to be replaced.
4. Slide the new tine in place and install the innermost bolt and nut. Tighten securely.
5. Retighten the outermost bolt and nut to completely secure the new tine.

C. Drive Belt Replacement

1. Remove top guard.
2. Slide belt off of both pulleys and over to the right side bearing.
3. Remove bolts attaching the right side jackshaft bearing.
4. Lift jackshaft up far enough to slide the belt out under the bearing.

5. Slide new belt in and reinstall bearing hardware and tighten securely.
6. Reinstall belt on both pulleys and check alignment.
7. With bail in the engaged position check belt finger clearance. Finger should not be touching belt and should have no more than 1/8-inch clearance. Also check idler pulley alignment.
8. Check belt tension by measuring at the idler pulley in the disengaged position, then in the engaged position. The spring should stretch ¼ to 3/8 inch. If not see belt tension adjustment.
9. Reinstall cover.

D. Belt Tension Adjustment

1. Remove top cover.
2. Locate the cable adjustment at the top of the idler mount bracket. Check belt tension by measuring at the idler pulley in the disengaged position, then in the engaged position. The spring should stretch ¼ to 3/8 inch.
3. To increase tension back off bottom nut ¼-inch and tighten top nut against bracket.
4. To decrease tension back off top nut 1/4-inch and tighten bottom nut against bracket.
5. Once proper stretched is achieved reinstall guard and run unit to ensure belt does not slip and will declutch and stop when bail is released.
Note: If belt will not allow for proper adjustment it must be replaced.

E. Chain Replacement

1. Remove top guard.
2. Raise and support front of unit so drive wheels and tine reel can rotate.
3. Rotate front wheels until master link for the chain being replaced is on top by the jackshaft sprockets.
4. Release tension on chain by loosening idler sprocket bolt.
5. Remove master link and remove chain.
6. Inspect sprockets replace as needed,
7. Install new chain on sprockets and install master link provided with new chain and install clip opening opposite the direction of chain travel.
8. Reset the tension on the chain by sliding idler against chain.. **Note:** Over tensioning the chain will cause premature wear of the chain and sprockets. A properly tensioned chain will have ¼ to 3/8 inch of slack when moved by hand.
9. Reinstall guard.

F. Lubrication

Lube Point	Type of Lube	Service Interval
Chains	SAE 30 Oil or Chain Lube	25 Hrs
*Bearings (6)	Grease	50 Hrs
Linkage	Spray Lube	25 Hrs
**Front Wheels	Grease or Anti-seize	Once per year
Cables	Spray Lube	25 Hours

*Top cover will have to be removed to access jackshaft bearings.

**Remove front wheels and coat axles with grease or anti-seize to prevent wheels from seizing to the axles.

Note: Use care when using a pressure washer not to direct spray around the axle area. Chains and bearings should be lubricated after each cleaning with a pressure washer.