Fan Maintenance Checklist

Keeping your fans at top performance is important to maximize cooling and the life of your fans. Before each grow out you should check the following:

- Clean Fans And Shutters
- Check Pulley Alignment
- Check Belt Wear
- Check Motor Pulley Wear
- Check Belt Tightener

Pulley Alignment

This is an example of a fan motor base misalignment. If the fan motor base is not square to the shaft, then the motor pulley will sit at an angle. Even if you align the pulleys correctly, the belt will wear and cut into the motor pulley. This can be corrected by squaring up the motor base to the frame.

Another example of misalignment is when the motor pulley is not under the fan pulley. As you can see from below this is very easy to fix. Using a straight edge, place it across the fan pulley. Loosen the motor from the motor base or loosen the pulley on the motor to slide it against the straight edge. Tighten the motor base or the set screw on the motor pulley depending on which one you loosed to move the pulley.
Pulley And Belt Wear

Worn out fan belts will not allow the fan to spin to the maximum RPM. Even if the belt is tight the worn out belt will fall down into the motor pulley. This is the same as reducing the motor pulley one size. If the belt is down inside the pulley as shown, then your belt or motor pulley is worn out. Always check the belt first before assuming your pulley is worn.

Adjusting Belt Tightener

Belt tighteners have become a standard on all agriculture fans. Belt tighteners are a great way to make sure that your belts are tight and are not slipping. Because of this, most fans require little adjustments of the belts once they are installed. The automotive style belt tighteners are the most common and the one that Acme uses on most of the agriculture fans. The belt tighteners need to be set to maintain the correct tension. To adjust them, first loosen the hex nut at the base of the tightener and use a wrench as shown.

On The bottom of the belt tightener there are markers. When there is no tension the base marker is in the middle of the marks. Rotate the base until the alignment marker on the bottom of the tightener is on the first mark as shown below. Do not go beyond the second mark.