Variable Speed Pulley Hub Wear Check

ISSUE CHANGES –

ISSUE	DATE	CHANGES
1	17.07.23	TECHNICAL SERVICE BULLETIN CREATED
2	18.08.23	PULLEY WIDTH VARIATION DIMENSION NOW DECIMALISED

Refer to Operators Manual for Safety Procedures

Shelbourne Reynolds recommends that it is good practice to thoroughly check over a Stripper Header prior to harvest in order to maximise the machines efficiency and avoid any potentially disruptive and inconvenient down time during harvest.

This bulletin provides guidance on checking variable speed pulley hub wear.

This process must be carried out prior / during variable speed pulley bearing replacement.

Two methods are shown:

1. **Pulley fully functioning on machine**

2. **Pulley removed from machine / disassembled**

Variable Speed Pulley Hub Wear Check

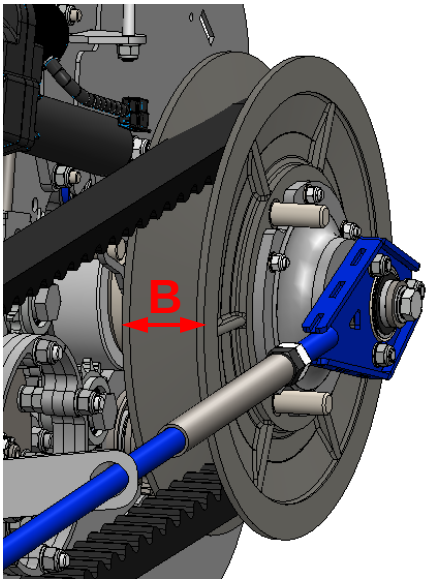
Method 1: Pulley fully functioning on machine

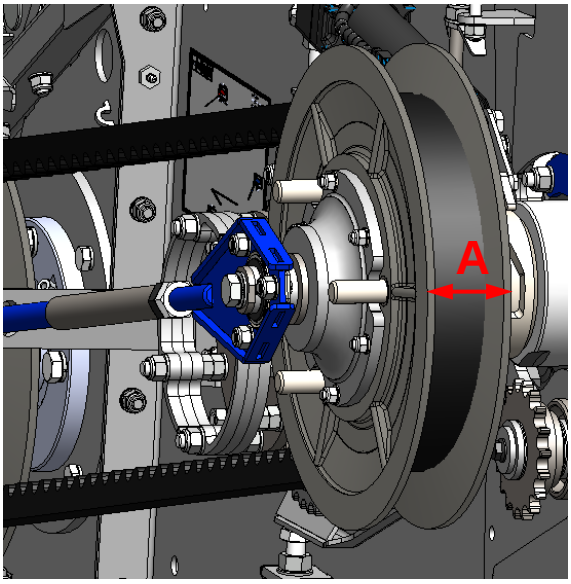
1. Run the Stripping Rotor to your typical operating speed (Combine at full revs).

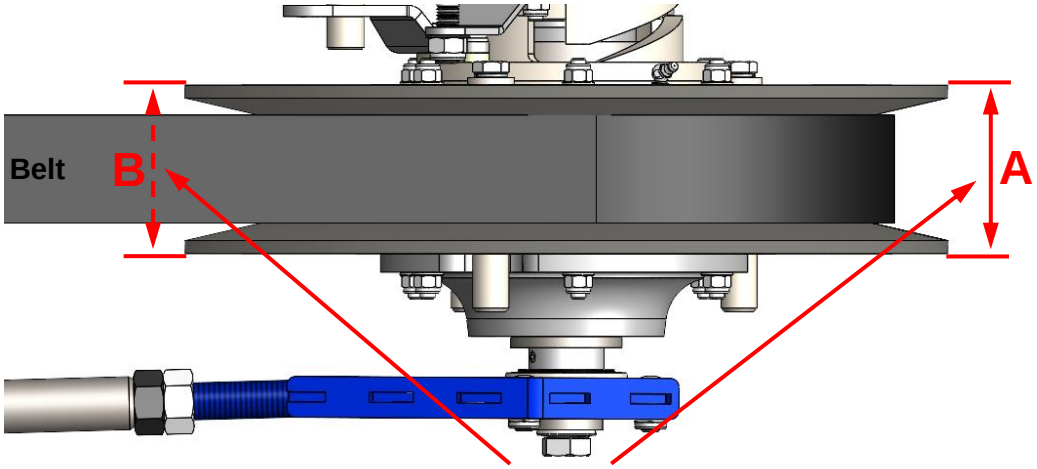
Stop the machine and implement the safe stop procedure

2. Open drive guard fully or remove from the machine for best access.

3. Record measurements (using table on page 3) from rear (A) and front (B) of pulley as shown below.







Measure width on outside of pulley sheaves

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4. Close guard, run header and increase rotor speed by a 50rpm increment (Combine at full revs) using the "+" button on the Shelbourne monitor.

Stop the machine and implement the safe stop procedure

5. Repeat steps 2 and 3.

6. Close guard, run header and reduce rotor speed to 50rpm less than your typical operating speed (Combine at full revs) using the "-" button on the Shelbourne monitor.

7. Repeat steps 2 and 3.

Measurement	A	B	Variation (A-B)
Example	79mm or 3.110"	78mm or 3.070"	1mm or 0.040"
Typical Rotor Operating Speed: _____rpm			
+ 50rpm			
- 50rpm			

If pulley width variation is measured at greater than 2mm or 0.080" (5/64") at any speed, it is recommended the pulley hubs are replaced.

Replacement pulley assembly: KIT-01463

Excessive variable speed pulley hub wear can lead to premature cam bearings failure and may cause potential damage to the machine and possible risk of fire.

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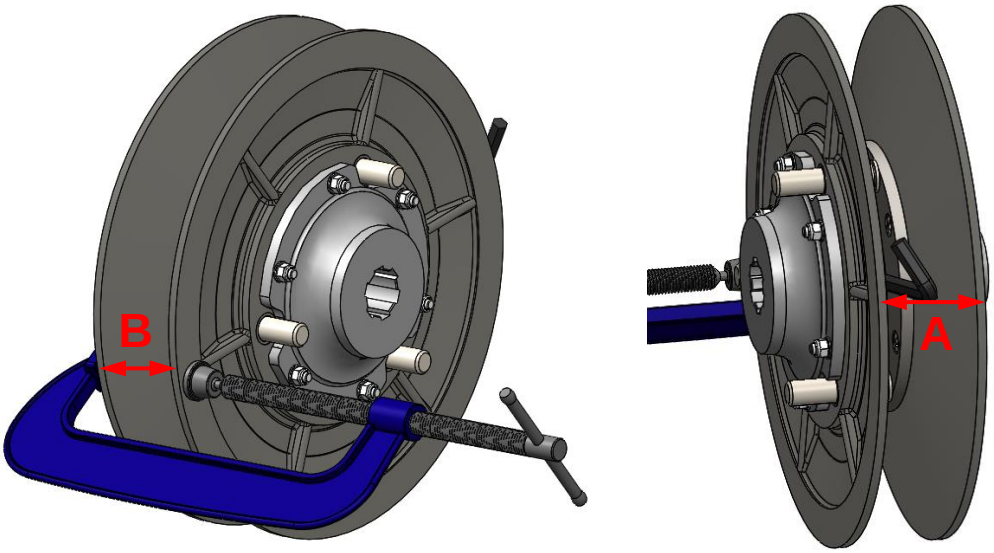
Method 2: Pulley removed from machine / disassembled

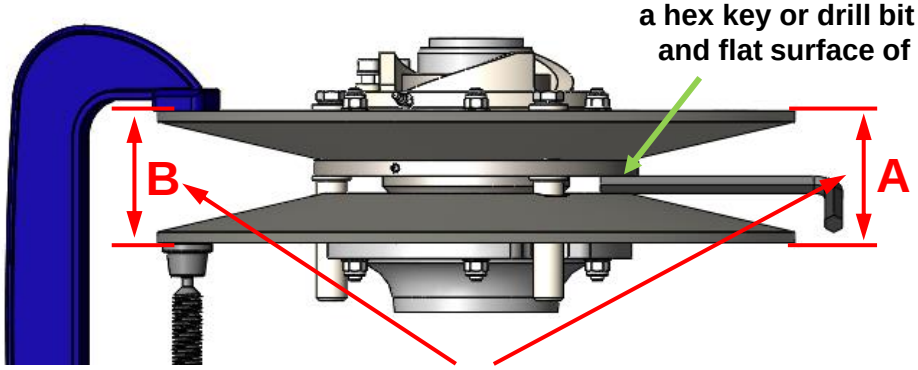
Stop the machine and implement the safe stop procedure

1. Remove rear pulley assembly from the machine.

2. Using a clamp and appropriate size shim (listed in results table on page 5). Position clamp and shim as shown in diagram below. Apply light tension to clamp. Do NOT overtighten.



Use a reliably sized shim such as a hex key or drill bit between hub and flat surface of inner pulley



Measure width on outside of pulley sheaves

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3. Take measurements at ‘A’ and ‘B’ as shown in diagram. Record results in table below.

4. Repeat steps 2 & 3 for the three shim sizes. Calculate and record Variation.

Shim Size	A	B	Variation (A-B)
Example	79mm or 3.110”	78mm or 3.070”	1mm or 0.040”
6.5mm - 1/4”			
11mm - 7/16”			
14mm - 9/16”			

If pulley width variation is measured at greater than 2mm or 0.080” (5/64”) at any shim size, it is recommended the pulley hubs are replaced.

Replacement pulley assembly: KIT-01463

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