Adjusting the LEC position on the 3230 (TS4 Version) engine

Description

- adjusting the leading edge clamp position
- four LEC clamps are used on the TS4

Context

☑ Trendsetter 3230 (TS4 Version)

Special tools

- Feeler gauge
- 17 mm combination wrench
- UHMV tape



DANGER: Beware of moving parts and/or the potential movement of mechanical parts whenever the safety interlock override (SIO) key switch is in the Interlock Override position. To prevent death or serious injury always keep your hands and other body parts out of the danger zones and follow standard safety precautions.

For more information, see:
http://techplanet.creo.com/output/computer_to_plate/all_ctp/nav/safety.htm

Steps

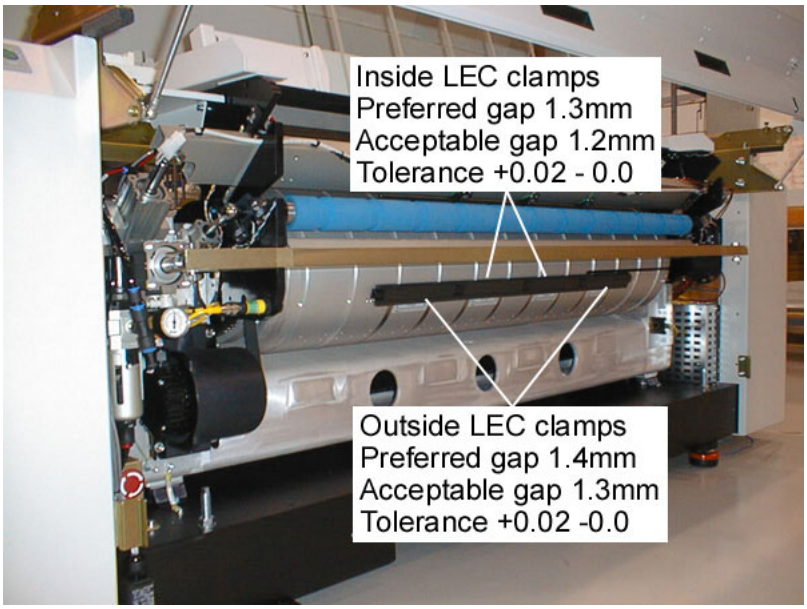
To adjust the leading edge clamp:

1. Turn the SIO key switch to the Interlock Override position.
2. Make sure the leading edge clamp (LEC) actuator bar is retracted by typing `lec off`.
3. Rotate the drum so that the groove on the LE clamp is aligned with the push bar on the LEC actuator bar.
4. Activate the LEC valve to push the LEC against the drum clamp.
5. Use a feeler gauge to check the gap between the drum and each of the four LEC clamps:

   The gaps should be as follows:

   Outside clamps (two) Preferred 1.4mm +0.2 mm –0.0mm
   Acceptable 1.3mm +0.2 mm –0.0mm

   Inside clamps (two) Preferred 1.3mm +0.2 mm –0.0mm
   Acceptable 1.2mm +0.2 mm –0.0mm



If the gap is not correct at each clamp:

1. Rotate the drum to the LE backbone engagement position as indicated by `set al lepos` and hold. (drum move 16XXXX h)
2. Activate the LE backbone cylinders using `lec on`
3. Idle the drum with the `drum idle` command. The drum will be held in position by the LE backbone.
4. Measure the gap between the clamp body and the drum for each clamp body.

To adjust the LEC gap if it is constant for all clamps:

If the gap is evenly tapered or constant across all clamp bodies (whether too big or too small) correct it by adjusting the rod ends:

1. Loosen the rod end locknut with a 17 mm combination wrench
2. Turn the piston with the 17 mm wrench

   Turn counterclockwise to increase the gap; clockwise to decrease the gap.
3. Once adjusted, hold the piston in place and tighten the lock nut snug against the piston with the 17 mm wrench.

To adjust the LEC gap if not constant across all clamps:

If the gap is not evenly tapered or constant across all clamp bodies

1. Remove the LE backbone pushbar that corresponds to the clamp that opened the least.
2. Install a strip of UHMW tape (item 0630) and re-attach the pushbar.
3. Replace the backbone and recheck the gap for each clamp body. If it is not within spec, repeat the procedure.

4. Tap the push block with a screwdriver when the backbone is against the clamp to ensure that it is seated fully in the clamp
5. Once all clamps open within spec, remove the backbone once again and tighten the push block screws. Be careful not to let the push blocks move.
6. Install one 3/8” nut on each shoulder bolt and tighten against the LEC until snug.
7. Turn the SIO key switch back to the Normal Operation position and remove the key.

Notes

On the Trendsetter 3230 (TS4 Version), fixed orifices are used on one side of the engine only (away). The speed control on the cylinder is used for balancing the LEC backbone only.

See also

Balancing the Trendsetter 3230 (TS4 Version) backbones