

5-STEP SPROCKET ALIGNMENT PROCEDURE



LUDECA

1



Pre-Alignment Checks



Safety:

Lock-out and tag-out the machines.



Visual inspection of the sprockets and baseplate.

Replace sprockets if needed.



Clean up: remove rust, scale, paint, dirt from under and around the feet. Clean sprockets as well.



Replace damaged shim packs with new, corrosion and crush resistant shims.

2



Runout and Soft Foot



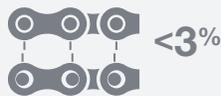
Check and correct shaft runout.



Check and correct sprockets rim runout (radial) and face runout (axial).



Using feeler gauges find obvious gaps under the motor feet and fill them with shims, to eliminate any soft foot condition.



Check for chain elongation. If it is more than **3%** replace chain and sprockets



Torque bolts to specifications.

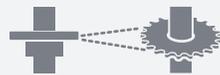
3



Laser Alignment



Set up laser alignment system and measure misalignment.



Correct **twist** misalignment by shimming the motor feet.

Recommended tolerance: ± 0.5 degrees. (9 mils/inch)



Correct **angular** misalignment by moving the machine horizontally.

Recommended tolerance: ± 0.5 degrees. (9 mils/inch)



Correct **offset** misalignment by moving the machine axially.

*Recommended tolerance: Offset: $0.045 \cdot P$
Where P=chain pitch in inches*

4



Chain Tensioning



2x

Take two sets of chain deflection or sag measurements.



Set the chain deflection to 2% - 4% of the sprocket distance.

Be careful not to affect the alignment during these adjustments.



Re-check the alignment.



24 HRS+

Run machines for twenty four hours to allow chain to settle, then recheck deflection or sag. Readjust as necessary.

5



Documentation



Save the alignment file, if your system allows for it.



Print the report to document the alignment, if your system allows for it.

72-96 HRS

Run the machines at least 72 hours, but not more than 4 days.

Check deflection or sag again, to 2% - 4% of the sprocket distance.