Roller adjustment for LEDCO EP series pre year 2000 (With the two front panel knobs)

NOTE: For setting the roller pressure when running thinner material (Under 1/4" thick). on step 3 (Of the attached instructions) don't use the spacer blocks. unless you are running material 1/2 to 1" thick.

There are two steps, adjust the gap, then adjust the roller pressure.

First set the gap

Lock the right handle so the rolls are all the way up

Loosen the two front handles, then use the left side lever to lower the rolls all the way. You may want to push the top roller down so you know it is down as low as it will go on both sides.

Then lock the two front knobs.

Drop the roller down using the right side lever. Don't put it in the lock position, just lower them down so the rollers are sitting on top of each other.

To adjust the roller pressure:

Once you have the rollers in the above position.

Remove both side covers and you will see the pressure springs on each side.

Loosen those bolts that hold the springs down until the springs are loose, They should not have any up and down play, just be loose.

I usually get them to the point where they have up and down play and then tighten the bolt just until that play goes away.

Now Add 2 complete turns to those bolts.

I try to mark them with a file, a marker, or a piece of tape as it's hard to see them so you can count the turns.

Do one on each side, then go back and do the second ones, kind of like tightening up a car wheel. It makes it more even.

That is how they come out of the factory

There are circumstances when users want more roller pressure.

You can add more.

But always add it in equal amounts. You can add 1/2 turn to each bolt.

A little bit goes a long ways. The factory settings give about 40lbs at the nip, which is what most films specify.

Adding 1/2 turn to each bolt will get the pressure to about 60 lbs, so a lot more.

Anything beyond 3 total turns will start to bow the roll causing less pressure in the middle and will cause a "Boat Wake" type of wrinkle.

The job will look good for 4-5 ft then will have wrinkles starting in the center and moving outwards.

This can also happen if the feed table is not flat and has a dip in the middle from people leaning on it or setting heavy items on it. Make sure it is flat and straight.

If it's working good now, leave it alone.

Keep the rollers clean. Don't use Windex or any cleaner with ammonia.

That dries out the rolls and makes them slippery.

We use Simple Green or one of the Citrus cleaners.

As far as film tension we always say less is best. Use enough to get the wrinkles out but that's all

Too much tension will stretch the film and cause curling and if there is a lot of tension, the corners will lift.

This is because a lot of tension stretches the film, it's then stuck to the substrate, and then , as it sits, the film wants to go back to it's original size.

The corners are the first place you'll see it.

The attached directions were just for setting the gap so I typed out the whole process so you can see how to adjust both the gap and the roller pressure.

Lamination Quality:

On pressure sensitive laminating everything happens when the material goes through the rollers. So the slower you go, the longer the material spends under pressure, the better the lamination.

But as long as you're getting satisfactory results then you're fine.

Sometimes when you go real fast your lamination will look cloudy. If you let the job sit, that cloudiness will go away.

This is because the adhesive is like molasses. It flows very slowly. This is an issue when the room, film, or substrate is cold. The warmer it is the better the adhesive flows. You'll notice it more on darker colors. If you need it to look real good immediately then you can run the machine slower.

If the job isn't going anywhere for a while then the speed is not as critical.

Just sitting overnight is enough time for the adhesive to flow and the job will look fine.