Technical Information Leaflet

TIL: 003

LM2700 Backlapping
BACK-LAPPING A BARONESS LM2700

If you are unable to obtain a satisfactory cut with just a light blade contact then you will need to back-lap the cutting cylinders.

Back-lapping is an interim method of keeping the blades sharp in between re-grinding.

Before you start the process you will need the following:

**A long handled brush.** This can be made by using a wallpaper paste brush and extending the handle by using a suitable length of tube. **It is important to have the handle extended so that your hands are nowhere near the rotating blades during the back-lapping process.**

**A pot of back-lapping paste.** Back-lapping paste is a water soluble abrasive grinding paste. It is available in different grades but the grade that we would recommend for back-lapping Baroness blades is 80 grit, or Course.
Firstly adjust the contact between the cutting cylinder and the bottom blade to achieve the best cut possible keeping the contact even across the entire width of the blades.

Then increase the contact so that it is slightly heavier than you would use for cutting, but still make sure that the cylinder rotates with just a light pressure.

Repeat this for all 5 cutting units.

Swing out the rear units by removing the unit positioning pin.

Turn off all five cutting unit hydraulic motors using the lever shown.
With the aid of an assistant and with the parking brake on, start the engine and leave it running at idle. The assistant should remain on the seat and able to stop the machine in an emergency.

With the engine running select cutting cylinder reverse (switch back). Please note that on newer models you will find this switch located under the engine cover on the right hand side just below the relays.

Your assistant should remain on the seat throughout the process and should be fully briefed and familiar with the emergency shut-down procedure.

Turn the cutting reels on by pressing this switch forward.

Select the cross-cut position of the cutting units by pressing this switch forward.

Lower the units to the floor by pushing this leaver forwards. Please note that the cutting cylinders should not be rotating as these were turned off at the motors earlier in the process.

Select the first cutting unit that you want to back-lap and turn the unit on using the hydraulic motor selection lever as shown.

The cutting cylinder should now start rotating in a reverse direction.

Note: Do not perform the back-lapping process with the cylinders rotating in the normal cutting direction.
After applying the abrasive paste several times to the cutting cylinder, leave it to rotate during which time the grinding noise should progressively lessen.

With the first cylinder still rotating, move on to the second cutting unit and repeat the process. After you have applied the cutting paste to the second unit several times, leave this unit to continue rotating.

With the second cylinder still rotating, go back to the first cylinder and turn it off at the motor using the lever.

Apply the back-lapping paste to the top of the rotating cutting cylinder using the long handled brush as shown.

**Do not allow the brush to enter too far into the cutting cylinder as this could pull the brush into it. Simply allow the tips of the brush bristles to flick the rotating cutting cylinder.**

Move the brush from side to side covering the full width of the blades with paste.

Repeat this several times, reloading the brush with abrasive paste each time.

Dip the long handled brush into the back-lapping paste until the brush has a good covering of the abrasive paste.
Next, move on to the third unit and repeat the process.

With the third cylinder still rotating, go back to the second one and turn it off.

Work your way around all 5 cutting units as described above so that you only ever have two units rotating at once, as having the cylinders running dry for a prolonged period of time can cause damage to the blades.

Once all 5 units have been back-lapped you will need to thoroughly wash the back-lapping paste from the blades.

The best way to do this is to turn the units on one at a time, and with them rotating direct a jet of water at them. Move the hose from left to right until all of the paste is removed.

Turn each unit off after you have finished washing it before moving on to the next unit.

Once the cutting units are dry, check the cut using a strip of paper.

Normally after back-lapping, no further adjustments are necessary, however, you might need to readjust the cut slightly by bring the cylinder down onto the bottom blade using the adjusters as shown.

If after back-lapping you still cannot get the unit to cut properly then you might have to repeat the back-lapping process or even consider having the units re-ground.