Technical Information Leaflet

TIL: 002

LM2700 Blade Adjustment
BARONESS LM2700 BLADE/CUT ADJUSTMENT

Before attempting to adjust the blades in order to put the machine ‘on cut’ please make sure that:

The rear cutting cylinder pivot pins must be free rotating and that this bolt/nut is not over-tightened or seized due to corrosion.

If it is seized: remove the bolt and clean all surfaces (bolt and drilling) with emery cloth. Then coat the bolt in an anti-seize compound (Copper Slip etc) before reinserting the bolt.

Do not tighten the nut tight. Pinch it up and then slacken it off just a little in order to allow the bolt to rotate.

Make sure that this spring is sufficiently tensioned but without it being ‘coil bound’ through over tightened. There must be some visible gap between each spring coil.

To adjust the spring tension, rotate this spring pressure screw. Rotate it anti-clockwise to add tension and clockwise to decrease tension.

Make sure that this bolt is free rotating and not clamping the aluminium casting to the mower frame. To adjust this bolt correctly, tighten it fully and then slacken it off a little until it rotates.

Finally, before commencing adjustment it is very important to make sure that the cutting units are clean, especially behind the cutting cylinder between the bottom blade carrier and the cutting cylinder. If there is build up on top of this blade carrier then this can restrict the cutting cylinder from lowering onto the bottom blade. If necessary open up the rear grass deflector and clean the area.
**Adjusting Blade Contact**

**Important:** Baroness blades are designed to cut with minimal contact. Never adjust them so that they are in anything more than very light contact as this will cause friction, heat and wear to the blades.

Whilst other manufacturers run their blades with hard contact, they are made from a softer material which is not as durable as the Baroness. If the Baroness blades are adjusted correctly then they will last up to 5 times longer between regrinding than other makes of blades.

To adjust the contact between cutting cylinder and bottom blade adjust the nut.

Turning it anti-clockwise will lower the cutting cylinder onto the bottom blade and therefore increase contact.

Turning clockwise will raise the cutting cylinder away from the bottom blade and decrease contact.

To adjust blade contact you do not need to slacken any other nuts or bolts. When you finish adjustments do not tighten this or any other nut. The only nut that you need to turn during this process is the top adjustment nut.

To check that the blades are cutting correctly use a strip of paper (as shown).

With the strip of paper held square to the bottom blade rotate the cutting cylinder and see if the blades will cut the paper. **Never rotate the cutting cylinder using your hand as the blades are very sharp and can cause serious injury.** Use a short wooden pole (small length of broom handle etc) to rotate the cylinder.
If the paper is not cut you will need to lower the cutting cylinder in order to increase blade contact.

To do this, rotate the cylinder adjustment nut anti-clockwise as shown.

There are two cylinder adjustment nuts, one either side of each unit. Initially make sure you adjust both of them by the same amount at the same time in order to keep the cylinder parallel to the bottom blade.

Only ever adjust them by small amounts at any one time.

Check the cut again by using a strip of paper as previously explained. **Once again please remember to never put your hand into the cutting cylinder.**

If the paper is still not cut correctly repeat the above process of lowering the cutting cylinder until the paper does cut.

If one side cuts paper but the other side does not, lower the cutting cylinder further but only on the side that it is not cutting.
If you are unable to achieve an acceptable cut with just a light contact by performing the above adjustments then the blades have become a little blunt and will need back-lapping.

Once the blade is cutting paper on both sides you need to check that you do not have excessive blade contact.

To do this you need to use another strip of paper but this time hold it flat along the surface of the bottom blade as shown.

When you rotate the cutting cylinder the paper should not be cut but should just leave an indentation line in it. If it does this it is set ok. If it cuts the paper then the contact is too great and the cutting cylinder will need to be raised by rotating the adjusting nuts clockwise.

Repeat these exercises until the paper is cut across the full width of the unit when held square to the bottom blade, but just leaves an indentation line in the paper when it is held flat along the bottom blade.

Once this is achieved the blades are correctly adjusted.