

Line up



Walk Behind Greens Mower

**LM18GB**  
**LM56GB**  
**LM66GB**

Walk Behind Tee Mower

**LM66TB**

Specification

| Model                            |   | LM18GB  | LM56GB  | LM66GB  | LM66TB              |
|----------------------------------|---|---|---|---|---------------------|
| Dimensions                       | Total length with grass catcher   | 54.72 in   139 cm   | 55.51 in   141 cm   | 55.51 in   141 cm   | 55.51 in   141 cm   |
|                                  | Total width without travelling wheel  | 33.07 in   84 cm  | 37.01 in   94 cm  | 40.55 in   103 cm   | 40.55 in   103 cm   |
|                                  | Total length Steering handle  | 45.28 in   115 cm   | 40.55 in   103 cm   | 40.55 in   103 cm   | 40.55 in   103 cm   |
| Weight                           | Main unit without grass catcher and travelling wheels   | 208.11 lb   94.4 kg   | 198.41 lb   90.0 kg   | 209.88 lb   95.2 kg   | 209.88 lb   95.2 kg |
|                                  | Grass catcher   | 6.83 lb   3.1 kg  | 7.28 lb   3.3 kg  | 7.94 lb   3.6 kg  | 7.94 lb   3.6 kg    |
|                                  | Groomer   | 6.61 lb   3.0 kg  | 8.82 lb   4.0 kg  | 8.82 lb   4.0 kg  | -                   |
|                                  | Travelling wheel (for one machine)  | 15.21 lb   6.9 kg   | 15.21 lb   6.9 kg   | 15.21 lb   6.9 kg   | 15.21 lb   6.9 kg   |
| Engine                           | Model   | SUBARU EX13D  |   |   |                     |
|                                  | Type  | Air-Cooled, 4-Cycle, Slant Single-Cylinder, Horizontal P.T.O. Shaft, OHC Gasoline Engine                  |   |   |                     |
|                                  | Total displacement  | 7.69 cu.in.   126 cm <sup>3</sup> (0.126 L)   |   |   |                     |
|                                  | Maximum output  | 3.2 kW (4.3 PS)/4,000 rpm *1  |   |   |                     |
| Fuel tank capacity               | Gasoline 0.61 U.S.gal.   Gasoline 2.3 dm <sup>3</sup> (2.3 L)   | Gasoline 0.61 U.S.gal.   Gasoline 2.3 dm <sup>3</sup> (2.3 L)   | Gasoline 0.61 U.S.gal.   Gasoline 2.3 dm <sup>3</sup> (2.3 L)   | Gasoline 0.61 U.S.gal.   Gasoline 2.3 dm <sup>3</sup> (2.3 L)   |                     |
| Operating width (Mowing width)   | 18 in   45.7 cm   | 22 in   55.7 cm   | 26 in   64.6 cm   | 26 in   64.6 cm   |                     |
| Operating height (Mowing height) | 0.079 - 1.122 in   2.0 - 28.5 mm  | 0.079 - 1.122 in   2.0 - 28.5 mm  | 0.079 - 1.122 in   2.0 - 28.5 mm  | 0.079 - 1.122 in   2.0 - 28.5 mm  |                     |
| Blades                           | 11  | 9(option), 11   | 9, or 11  | 7, 9, or 11   |                     |
| Drive                            | Mechanical  | Mechanical  | Mechanical  | Mechanical  |                     |
| Speed (Mechanical)               | 2.98 mph @3,000 rpm   4.8 km/h @3,000 rpm   | 2.98 mph @3,000 rpm   4.8 km/h @3,000 rpm   | 2.98 mph @3,000 rpm   4.8 km/h @3,000 rpm   | 2.98 mph @3,000 rpm   4.8 km/h @3,000 rpm   |                     |
| Efficiency                       | 0.4 acres/hour (2.98 mph x mowing width x 0.8)<br>1,755 m <sup>2</sup> /h (4.8 km/h x mowing width x 0.8) | 0.5 acres/hour (2.98 mph x mowing width x 0.8)<br>2,139 m <sup>2</sup> /h (4.8 km/h x mowing width x 0.8) | 0.6 acres/hour (2.98 mph x mowing width x 0.8)<br>2,481 m <sup>2</sup> /h (4.8 km/h x mowing width x 0.8) | 0.6 acres/hour (2.98 mph x mowing width x 0.8)<br>2,481 m <sup>2</sup> /h (4.8 km/h x mowing width x 0.8) |                     |
| Tire size                        | 4.10/3.50-6   | 4.10/3.50-6   | 4.10/3.50-6   | 4.10/3.50-6   |                     |

\*The factory default maximum engine rpm is 3,400rpm.

[US]

**⚠ Safety notes**

- Please read the Owner's Operating Manual and other training material carefully. Be familiar with the controls, safety signs and the proper use of equipment before operation.

**♥ Assurance inspection**

- Regular inspection of the machine ensures long-lasting superior performance and safety.
- There are parts of machine prone to wear and deterioration from long periods of use. Please consult with local dealer or distributor for proper inspection and maintenance schedule.

Your distributor or dealer

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- Catalog No: LM56GB-US/16A-1000-APRISE



# Quality on Demand

Our goal at BARONESS is provide the golf course with a machine that will consistently cut grass cleanly, leaving a healthy uniformed cut and appearance.

Golf greens are the most recognized and talked about part of the golf course. The most important feature on any greens mower is the quality of cut.

The BARONESS walk behind greens mower has been recognized as the mower with the world's highest quality of cut. Our mowers are of the highest quality, our design process puts cutting quality as the top priority and our craftsman take the time to carefully handcraft each mower to perfection. BARONESS does not believe in compromising quality, and have spared no expense investing in the development of our Walk Behind Greens Mowers.

Our products incorporate many ideas to support the creation of the ideal green including a high quality and long lasting reel cutter and bedknife, in addition to the adoption of a superior durability all-gear drive. We offer a unique lineup of products and tools that can accommodate any type of work.

Our mission is to create the world's highest quality greens mowers. BARONESS provides greens mowers that are loved by greens keepers around the world.

Walk Behind Greens Mower

**LM18GB·56GB·66GB**

Walk Behind Tee Mower

**LM66TB**



# REEL CUTTER



## Globally recognized Quality of Cut

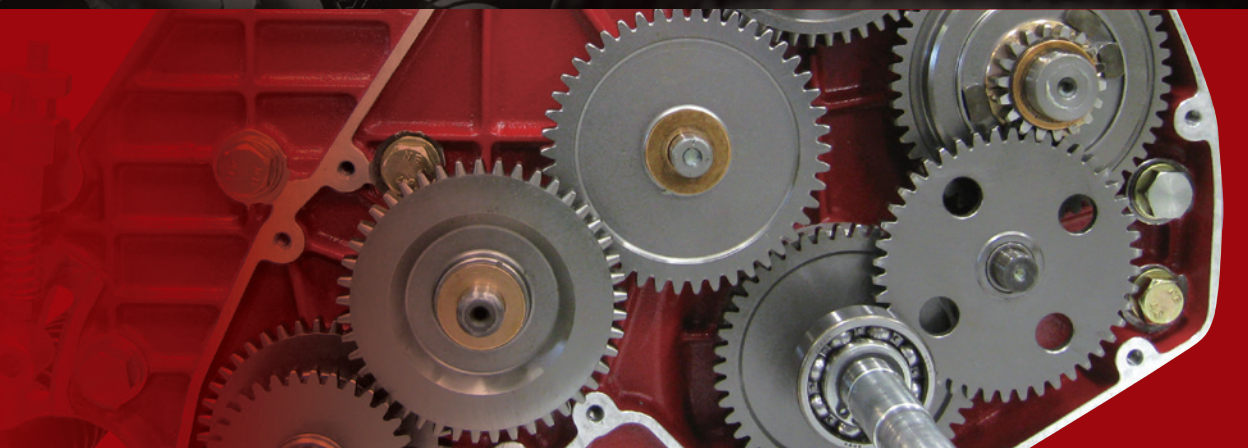
The BARONESS Walk Behind Greens mower is equipped with the sharpest reel cutter in the market. BARONESS uses its own special blend of steels and utilizes the same techniques used to achieve the hardness and tenacity that Japanese swords are known for. The hardness of the reel cutter and bedknife is designed to avoid countering. The precise mating surfaces increase the durability and life of both your reel and bedknife. BARONESS' reel cutters are made with tested and proven craftsmanship along with cutting edge manufacturing technologies through 16 processes, to achieve a beautiful cut and to quickly and smoothly create the perfect green.



# ALL-GEAR DRIVE

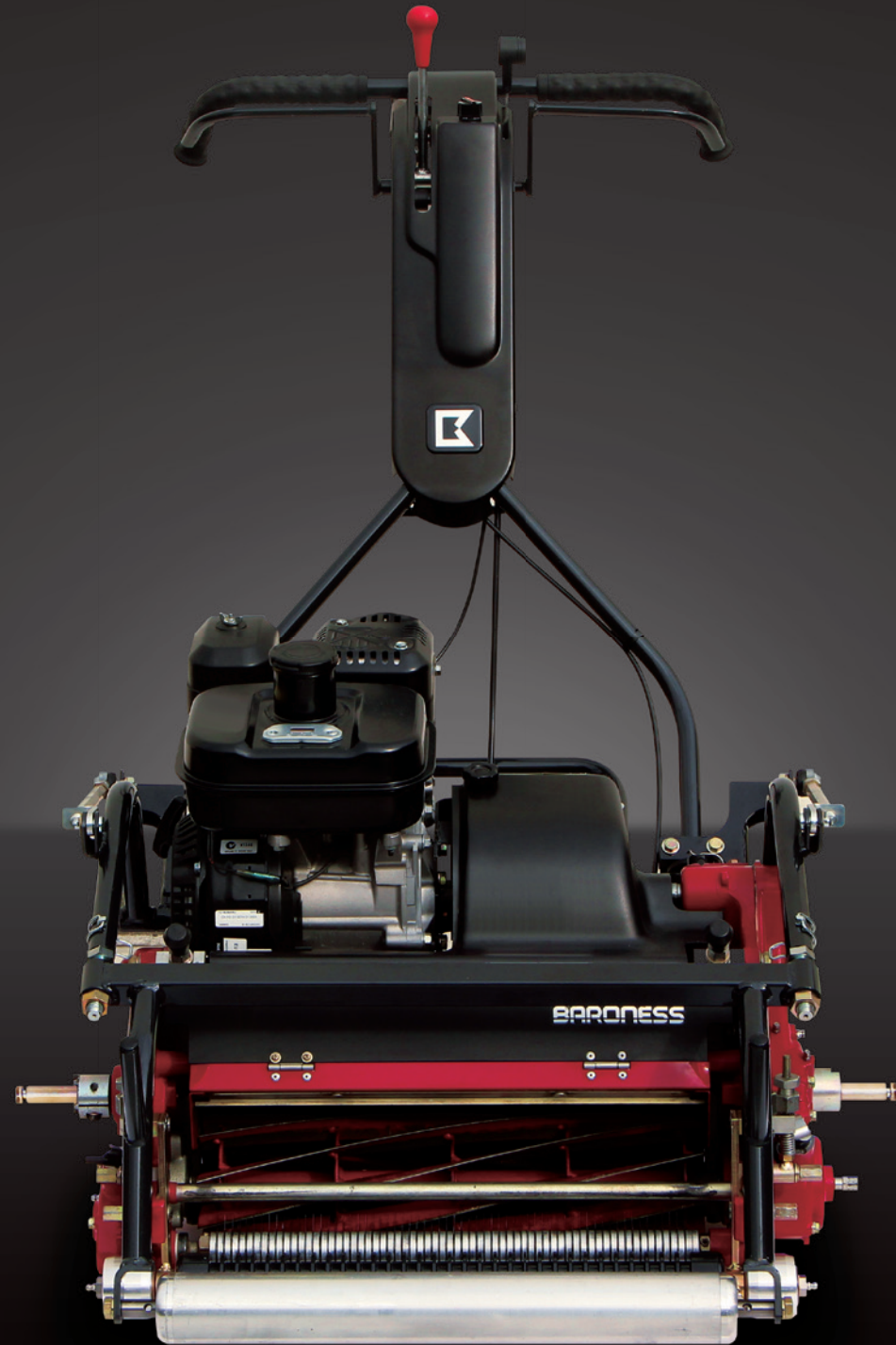
## Traditional All-Gear Drive

The BARONESS Walk Behind Greens Mower utilizes BARONESS' traditional all-gear drive. BARONESS' all-gear drive has 100% drive transmission rate with no slippage or lag between the drive (drum rotation) to reel rotation ratio. Additionally, it has extremely high durability compared to a belt or chain type. This gives peace of mind to the operator and allows them to provide a balanced cut.



SPECIAL TOOLS FOR CREATING PERFECT GREEN CONDITION

## New Standard in BARONESS Walk Behind Greens Mowers!

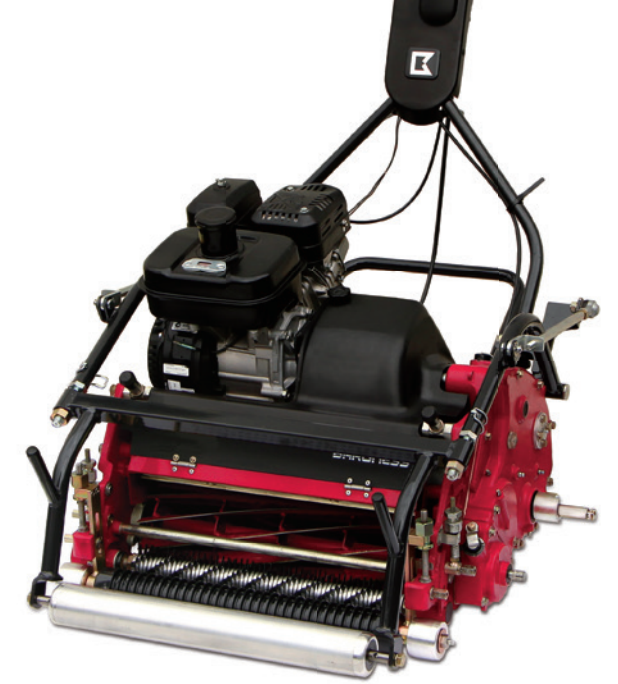


# IGCA

## Independent Grass Catcher Arm

IGCA (Independent Grass Catcher Arm) is a mechanism which doesn't allow the mower cutting height to change even if the amount of grass in the grass catcher increases. BARONESS eliminated as much operator error as possible by allowing more movement on the handle without effecting the cutting head. The cutting head will stay in the same stable position and continue cutting the turf, even if the handle is operated in a rough manner, the cutting height will not change from start to finish.

The operator is able to cut the green with the same balanced uniformed cut and constant HOC cut regardless of the operator's skill level or ability. (IGCA can be equipped to the LM18GB and LM56GB.)



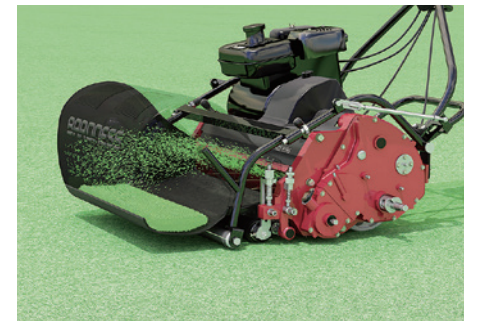
For cutting all the greens to the same uniformed height.

### Issue 1

As the weight of the grass clippings in the grass catcher increases and decreases it has direct effect on the HOC. The weight of the basket weighs the cutting head down lowering the HOC, when the basket is then emptied, the cutting head and HOC both rise too.

#### Solution

The grass catcher is supported on its own roller and support arm. This means the weight of grass clipping, thatch, sand etc. in the grass catcher increases it will have no impact on the cutting head's set HOC. The operator can confidently cut the green with the same even cut from start to finish.

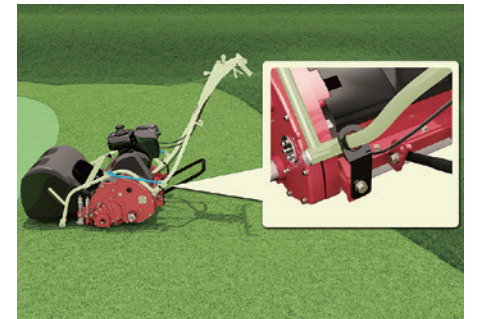


### Issue 2

Operator error and rough usage of handle causes the cutting height to fluctuate. As the operator pushes to hard or forward on the handle the cutting head can scalp, if the operator pulls back or leans on the handle the cutting head will lift or jump, changing the HOC.

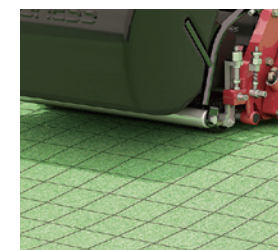
#### Solution

The grass catcher and handle are linked to eliminate movement of the cutting head during mowing. Adjusting the linking rod on the IGCA to center the handle arms in the handle adjusters keeps the cutting head's pressure consistent and allows tolerance for operator error.



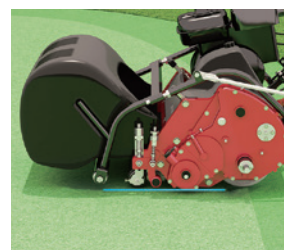
### Benefit 1

The mower will maintain a constant HOC regardless of the operator's skill level as long as the handle is within the hole of the handle adjuster. It is especially effective when the operator rapidly accelerates or when cutting on an undulation.



### Benefit 2

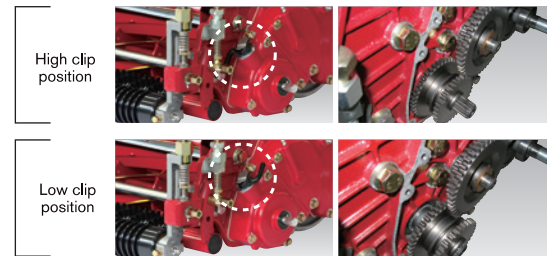
The weight of the grass catcher does not have an impact on the cutting head's front roller which reduces sinking (gouging or digging) due to the front roller's initial contact when entering a green.



SPECIAL TOOLS FOR CREATING PERFECT GREEN CONDITION

**FOC efficiency (High/Low Clip)**

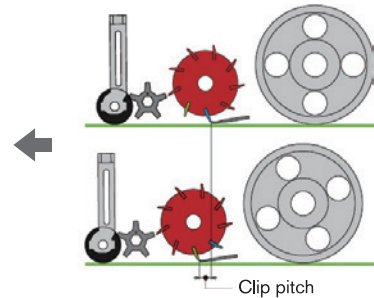
The FOC efficiency (High/Low Clip) switching mechanism comes standard. This mechanically controls the reel rpm in two different stages so that the operator can control the cut according to the condition of the green. (\*CE not supported)



**BARONESS Green Mower FOC (Clip pitch)**

| Model           | Walk Behind             |                         |                         |                         |                         |                         |
|-----------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                 | LM18GB·56GB·66GB·LM66TB |                         |                         | LM18GB·56GB·66GB·LM66TB |                         |                         |
| Engine rpms     | 3,000                   |                         |                         |                         |                         |                         |
| Reel rpms       | High Clip               |                         |                         | Low Clip                |                         |                         |
|                 | 1,818                   |                         |                         | 1,143                   |                         |                         |
| Operating speed | 2.98mph   4.8km/h       |                         |                         | 2.98mph   4.8km/h       |                         |                         |
| Reel cutter     | 11                      | 9                       | 7                       | 11                      | 9                       | 7                       |
| FOC(clip pitch) | 0.157in/cut   4.0mm/cut | 0.193in/cut   4.9mm/cut | 0.248in/cut   6.3mm/cut | 0.252in/cut   6.4mm/cut | 0.307in/cut   7.8mm/cut | 0.378in/cut   9.6mm/cut |

**Tips**



| FOC efficiency            | High Clip  | Low Clip  |
|---------------------------|--|---|
| Cut (grass cross section) | <b>Fine Clip pitch</b><br>   | <b>Regular Clip pitch</b><br>   |
| Ball roll                 | <b>Fast</b>  | <b>Regular</b>  |
| Benefits                  | <ul style="list-style-type: none"> <li>The finished cut creates a flatter green surface and promotes new offshoots (branches).</li> <li>BARONESS mowers are able to evenly cut greens with a larger number of sprouts, resulting in a smoother surface for truer ball roll.</li> </ul> | <ul style="list-style-type: none"> <li>Reduces stress on the grass.</li> <li>Lowering the wear on the reel cutter and bedknife reduces running costs and maintenance time.</li> </ul> |

**What is FOC(clip pitch)?**

The FOC is the distance the cutting head moves between on reel blade to the next when cutting grass. This can also be explained as clip pitch, clip rate, or clip cutting frequency.

**Why is there a need to switch the FOC efficiency?**

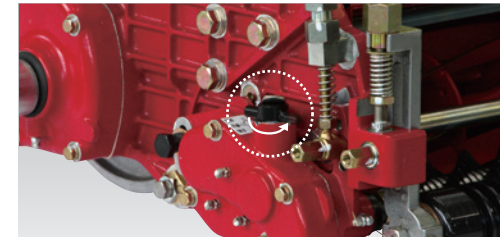
The advantages of a high clip frequency is a faster rotation of the reel cutter which shortens the FOC and enables a more uniform cutting of the green. This promotes new offshoots (branches), increases the number of sprouts and the density of the grass. After cutting the green, the grass surface will be smoother, which gives the ball a more truer roll. However, when the reel is moving at a high clip frequency issues can arise such as an increased amount of grass clippings after cut, a greater amount of wear on the reel cutter and bedknife due to sand when top dressing and the risk of increased stress during the summer months.

**What is the benefits of selecting the FOC efficiency.**

- Select the best FOC efficiency for the type of turf (bent grass, korai grass, Bermuda grass, etc.)
- The mower can also be used to cut the tee are if set to low clip frequency.
- Stress on the grass can be reduced by using the low clip frequency when cutting the surrounding area around greens (clean-up pass).
- Suppress chances of scalping by using the low clip frequency when de-thatching to leave the green soft.
- Cutting the green at a low frequency will reduce the collection of sand when top dressing and decrease the wear on the reel cutter and bedknife from mowing sand. (reduces running costs and maintenance time)

**Groomer, De-thatcher and Rotary brush**

Optional groomer can be attached, optional attachments are bi-directional. Can choose forward direction or reverse direction with a simple move of a lever.



**Benefits of Forward and Reverse Rotation**

- Forward rotation stands up grass that has laid-down for a better cut. Correcting the angle of the turf (grain of the turf) when cutting helps keep the length of the grass (cutting height) uniform and leads to improved putting quality. As a result this promotes off shoots in the grass, increases the number of sprouts, unifies the leaf area and makes the turf stronger.
- In reverse rotation the optional attachment can remove thatch between the surface and the grass. This prevents the occurrence of disease and harmful insects. This also makes it easier for the sand to penetrate down into the surface when top dressing.

|              | Groomer   |                 | De-thatcher   |                                   | Rotary brush   |               |
|--------------|---|-----------------|---|-----------------------------------|--|---------------|
|              | blades  | Blade thickness | blades  | Blade thickness                   | brushes  | Diameter      |
| LM18GB       | 64  | 0.020in   0.5mm | 32  | 0.039in   1.0mm (0.020in   0.5mm) | 30   | 2.36in   60mm |
| LM56GB       | 78  | 0.020in   0.5mm | 39  | 0.039in   1.0mm (0.020in   0.5mm) | 47   | 2.36in   60mm |
| LM66GB       | 92  | 0.020in   0.5mm | 46  | 0.039in   1.0mm (0.020in   0.5mm) | 55   | 2.36in   60mm |
| Intended Use | This has the benefit of straightening the green's turf and standing up laid-down grass to cut. The recommended attachment direction is forward. |                 | This is used to eliminate thatch and also benefits the green by standing up the grass blades vertically. The recommended attachment direction is reverse. |                                   | This benefits the greens by smoothing out the green's turf, eliminating debris and removing morning dew. These options can be operated in either forward or reverse direction according to the intended use. |               |

\*LM66TB does not have this setting.

**Front Roller**

Select the optimal roller according conditions and requirements such as quality of cut, reducing turf stress and such.



Grooved roller



Smooth roller

**Dew Roller**

The Dew roller increases cutting quality without stressing the green's with morning dew. Reduce the amount of work involved by cutting the grass and removing dew at the same time.

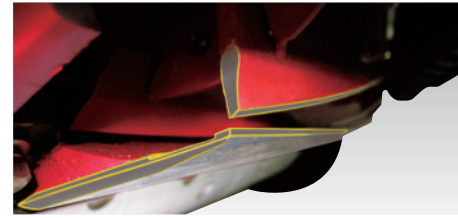
\*Cannot be used in conjunction with IGCA.



## SPECIAL TOOLS FOR CREATING PERFECT GREEN CONDITION

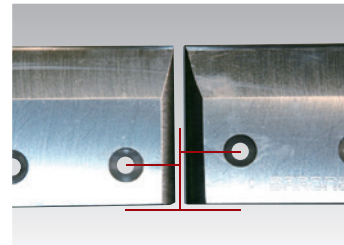
### Bedknife

The standard bedknife position is set at an aggressive distance and angle to provide the most truest cut. The reel cutter and bedknife distance on BARONESS Walk Behind Greens Mower is set to stand the grass up and firmly grab a large amount of grass for cutting.



| Bedknife options      | Model                 | Blade thickness       | Parts name       | Extended |
|-----------------------|-----------------------|-----------------------|------------------|----------|
|                       | LM18GB                | 0.059in   1.5mm       | 1.5 Bedknife 18G | STD      |
| 1.5 Bedknife 18G-44.5 |                       |                       | 0.098in   2.5mm  |          |
| 1.5 Bedknife 18G-47   |                       |                       | 0.197in   5.0mm  |          |
| 0.059in   1.5mm       |                       | 1.5 Bedknife 55G      | STD              |          |
|                       |                       | 1.5 Bedknife 55G-44.5 | 0.098in   2.5mm  |          |
|                       |                       | 1.5 Bedknife 55G-47   | 0.197in   5.0mm  |          |
| LM56GB                | 0.079in   2.0mm       | 2 Bedknife 55G        | STD              |          |
|                       |                       | 2 Bedknife 55G-44.5   | 0.098in   2.5mm  |          |
|                       | 0.118in   3.0mm       | 2 Bedknife 55G-47     | 0.197in   5.0mm  |          |
|                       |                       | 3 Bedknife 62.5-559   | STD              |          |
| LM66GB                | 0.059in   1.5mm       | 1.5 Bedknife 65G      | STD              |          |
|                       |                       | 1.5 Bedknife 65G-44.5 | 0.098in   2.5mm  |          |
|                       |                       | 1.5 Bedknife 65G-47   | 0.197in   5.0mm  |          |
|                       | 0.079in   2.0mm       | 2 Bedknife 65G        | STD              |          |
|                       |                       | 2 Bedknife 65G-44.5   | 0.098in   2.5mm  |          |
|                       |                       | 2 Bedknife 65G-47     | 0.197in   5.0mm  |          |
| 0.118in   3.0mm       | 3 Bedknife 62.5-648.4 | STD                   |                  |          |

### Extended Bedknife



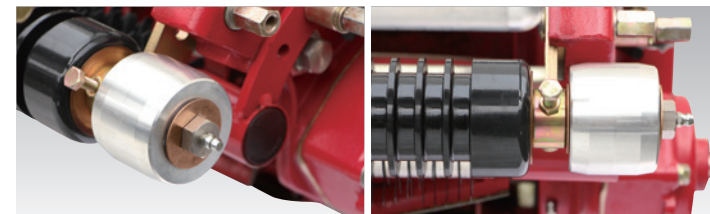
The holes for the extended bedknives are positioned differently than the standard bedknives. The distance between the bedknife edge and cutting reel is shorter or closer than a standard bedknife to lessen the risk of scalping.

### Benefits and Disadvantages of Extended Bedknives

|                               | Benefits   | Disadvantages   |
|-------------------------------|--|---|
| <b>Large</b><br>↑<br>Extended | <ul style="list-style-type: none"> <li>•Large amount of cut grass</li> <li>•Good contact between the end of the reel cutter and bedknife</li> <li>•Good cutting quality</li> </ul> | <ul style="list-style-type: none"> <li>•Possibility of scalping occurring</li> <li>•Large amount of sand collected from the top dressing</li> </ul>                                     |
| ↓<br><b>Small</b>             | <ul style="list-style-type: none"> <li>•Suppress scalping</li> <li>•Small amount of sand collected from the top dressing</li> </ul>  | <ul style="list-style-type: none"> <li>•Small amount of cut grass</li> <li>•Reduced contact between the end of the reel cutter and bedknife</li> <li>•Reduced quality of cut</li> </ul> |

### Support Rollers

This is an optional roller that can be mounted on either side of the mower to reduce scalping which occurs when the edge of the reel cutter makes contact with the green surface due to uneven undulations.



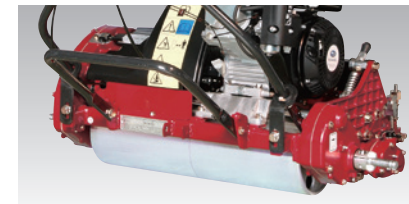
### Benefits of Support Rollers

A support roller prevents scalping when the reel cutter edge makes contact with the green surface usually in undulations or uneven surface.

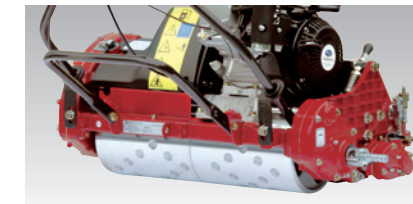


### Drum

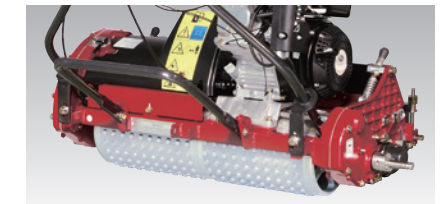
Select the type of drum which corresponds to the desired green quality.



No Dimple Drum



Dimpled Drum



RUG Drum

### Handle

BARONESS offers optional handles to fit every operator's preference.



Straight Handle



Drop handle



Loop Handle



Straight Handle (Type:S)



Drop handle (Type:S)

### Light

Safely cut grass during the morning or evening.

