The Bunton 22 inch greensmower is probably the most expensive pedestrian mower ever made. It retails at £2,950. Although sold under the Bunton name the machine is manufactured in Japan.

E. P. Barrus Limited have formed a new division within the Company to handle professional grass care machinery and now represent Bunton, who manufacture both in the U.S.A. and Denmark.

The Bunton Company is well known to north American golf superintendents and have been building commercial mowers for over thirty five years and has always prided itself on developing equipment that satisfies the particular needs of professional greenkeepers and groundsmen.

The Bunton special 22" pedestrian greens mower manufactured for them in Japan is of particular interest to greenkeepers.

The machine has a powered rotary brush mounted between the front roller and the reel, the brush rotates in the opposite direction to raise the grass before it is cut. The brush is easily adjusted to suit the pitch of the bottom blade and can be raised to reduce the amount of pressure on the grass, or disengaged for mowing without the brush. It can be replaced with a verticut attachment for thatching.

Equal power is supplied to both sides of the heavy gauge aluminium alloy drive roller to ensure a straight blade cut. The nine-blade, cutting reel is highly resilient and resistant to wear.

Quick release wheels are fitted with pneumatic transport tyres to give good adhesion on uphill ground: it has an all gear drive train and a 3.5hp Robin engine. Other features include a plastic grass box specially designed to catch all the cuttings and hold them. The 20" Zephyr from Greens of Arbroath is distributed by Claymore Grass Machinery.

It has a 10 bladed cutting cylinder and a superfine bottom blade, giving 140 cuts per metre.

There is a choice of three engines, the Honda, Villiers and Briggs and Stratton and the cut can be adjusted from 1" down to 3/32".

A number of improvements have been made in the past year including powered transport wheels. Retailing at £898.00 plus VAT, it is one of the more competitively priced machines for cutting golf greens.

Lloyds of Letchworth manufacture the Paladin self propelled greens mower, still regarded by many greenkeepers as the machine to obtain the finest finish. The height of cut is adjusted by a single knob which calibrates in one thousandth of an inch. The cylinder is eight bladed operating at a faster speed than other pedestrian machines. The additional stress is overcome by fitting tapered roller bearings instead of the usual ball bearings. This prolongs the life of the machine.

Priced at well over £1,000 the Lloyds Paladin is not a cheap greens mower but it does have a reputation for reliability.

The Atco Club range starts at around $\pounds600$ rising to $\pounds1,000$ for the B20 Special. The top of the range has a '12 bladed cylinder giving 134 cuts per yard with an adjustment from 1/16" to $1\frac{3}{4}$ " on cutting height. The cutting width is 20".

The Club B20 Special also has transport wheels and an adjustable comb attachment.

There is a trend for greenkeepers to return to the use of lighter pedestrian mowers for cutting greens. Many believe it reduces the problems of compaction and build-up of thatch.

> The 'Turf Groomer'TM, the green conditioner first introduced last year for the Greens King IV, has now been adapted to fit onto the Jacobsen pedestrian range of greensmowers.

Ransomes' range of greens mowers are three basic machines. The new GT Greens Triple launched last year, the widely used Triplex 171 and an old favourite, the pedestrian controlled Auto Certes.

The GT Greens Triple with 127mm (5in.) diameter 9-knife cutting cylinders can also be supplied with cutting units for tees as well as verticut and vibra spiker units. Hydraulically driven, each unit is interchanged without the use of tools.

Powered by a 8.9kw (12hp) twin cylinder Kubota water cooled diesel engine mounted on rubber mounts to keep vibration to a minimum, the new GT Greens Triple has an uncut turning diameter of 1m (40in) with power steering.

GT Modifications Power Steering Added

Since the prototype was demonstrated last August, modifications have taken place at Ransomes Nacton Works to improve the steering geometry. At the same time power steering has been added. This has improved the turning circle according to Brian Mitchell the Ransomes Technical Manager.

The GT Greens Triple is now in production and the first batch due to be delivered to dealers by the end of February has already been sold out. from revolving and the cutting units from either rising or lowering the engine will continue running when he dismounts. But as a safety measure if the foot pedal controlling ground speed is touched by anything, at any time, the engine stops automatically.

Still a firm favourite, the Auto Certes 10-knife cutting cylinder with a choice of 4 stroke engines gives 148 cuts per metre (135 cuts per yard). Height of cut is adjustable from 3 to 19mm ($\frac{1}{6}$ " to $\frac{3}{4}$ ").

An important feature of the Ransomes Auto Certes is its two-part fully machined smooth cast aluminium landroll with tapered ends which incorporates a differential, to make for easy turning without marking the fine turf.



PRICE COMPARISON for pedestrian mowers

Atco Club B20 Special £1,004

Bunton 22 inch Greensmower (including all extras) £2,950

Greens Zephyrs Superfine 20 inch £898.00

Jacobsen 22 inch Walk Behind £1,490.00

Turf Groomer Attachment £680.00

(including all optional extras) £2,100.00

Lloyds Paladine 21 inch £1,125.00 (optional extras add) £139.00

Ransomes Auto Certes 20 inch Briggs & Stratton £1,062.00

> Villiers Engine £1,130.00

(optional extras add) £146.00

All prices exclusive of VAT

The operator's platform on Ransomes new allhydraulic GT Triple Greens Mower can be raised in seconds for easy access to the centre cutting unit and to empty the grasscatcher.

The late Lawrence L. Lloyd, past member of the GCSAA and inventor of the Turf Groomer[™] greens conditioner, was honoured at a reception in Phoenix by the Jacobsen Division of Textron Inc.

At the reception, John R. Dwyer, Jr. President of Jacobsen, presented Mrs. Barbara Lloyd with a plaque commemorating her husband's contributions to modern turf care equipment design.

Lawrence Lloyd the Superintendent of a Californian Golf Course developed and tested the Turf GroomerTM over a period of two years. His primary goal was to combat fast thatch build-up on putting greens, but his invention proved to be beneficial in a number of ways. Improved green consistency, increased green speed without lowering cutting height, and improved control of broadleaf weeds and Bermuda creepage on green fringes were just a few of these additional benefits.

Lloyd who died tragically last year of a massive heart attack was vice president and superintendent at the Rancho Canada Golf Club in Carmel. Jacobsen purchased his patent in 1985. As part of the patent purchase agreement, the Lloyd estate receives income from the sale of each Turf GroomerTM.

Priority for dealer delivery has been given to those outlets who have obtained firm sales from golf courses.

To maintain the same quality of finish on every green a digital readout, calibrated in cuts per metre, enables the required cutting ratio to be selected and then set for mowing speeds up to 8 km/h (5mph). Transporting the mower between greens at speeds of up to 12 km/h (7½ mph) does not disturb the setting.

Interlock System Incorporated

During prototype trials on golf courses the engine needed to be stopped and restarted every time the grass catchers needed emptying. To overcome this an interlock system has been incorporated. Provided the operator leaves the controls in the correct position to prevent the cylinders The Toro 300 Triplex is still one of the most popular greens machines world wide, but with their two main competitors, Jacobsen and Ransomes introducing the diesel engine it is surprising Toro have not followed along similar lines.

It was fully expected that Toro would have unveilled a diesel version of their Triplex at this year's Phoenix Exhibition but instead, as far as greens machines are concerned they produced a prototype version of the 'turf groomer'.

Naturally Jacobsen, who have patented the invention by a Californian Golf Course Superintendent were somewhat upset and it is understood some hard words were exchanged between the executives of the two companies. Threats of writs were in the air and unless Toro can show their groomer is not a violation of patent it is doubtful whether it will ever make the production lines.