

of what adjustments have been made, one quick fix is to revert back to factory settings and start from there.

Knowing the true effective height of cut is also important to the health and appearance of the turf. A cutting unit height of cut is usually set in a shop using a metal bar across the rollers to simulate the surface on which the cutting unit rests. The problem with this bench set height of cut is the actual surface on which the cutting unit rides is not stiff like metal—it's grass. Grass absorbs and cushions some of the weight, and it can give even more if it is wet. Because of this, the effective height of cut, or the height at which you are truly mowing the turf, is usually much lower than the bench set height. Cutting the turf lower than you think you are could very well lead to after-cut appearance issues. An effective tip to improve after-cut appearance is to raise the bench set height of cut.

Using the optimal clip rate, a more complicated concept is critical to achieving high quality after-cut appearance. Although unnoticeable to the eye, reel mowers leave a subtle scallop pattern, similar to waves on water, on the surface of the turf. The peaks of the "waves" are created by the reel blades and bedknife working together to gather and clip the grass. Ideally, the distance between the wave peaks, or the clip rate, should be equal to the height of cut.

The factors that affect the distance between the wave peaks are the frequency at which a reel blade hits the grass (a combination of the number of reel blades and the speed at which the reel is spinning) and the forward ground speed of the cutting unit. If the reel speed is too slow in relation to ground speed, there will be too much space between wave peaks, resulting in visible clip marks and uncut grass. If the

reel speed is too fast, the reel blades will unnecessarily impact the grass blades multiple times before being cut. This can lead to turf tearing and leaf tissue damage which is a visual eye sore and is detrimental to the long term health of the turf.

SMART MACHINE PRACTICES

Keeping reels and bedknives sharp is critical to achieving good quality of cut and after-cut appearance. Whether it is cutlery, a saw blade or a mower reel, blades cut cleaner and more accurately when they are sharp. Dull reels and bedknives tend to tear grass versus cutting it. This can make the after-cut appearance less attractive and endanger the health of the turf.

Light bedknife-to-reel contact will ensure a good after-cut appearance, too. With light contact between the bedknife and the reel, the two act like a pair of scissors to clip the grass. This light contact setup also serves to act as a self-sharpening mechanism for the two blades. This can lead to less maintenance through a longer service interval.

Verticutting is a practice vital to an attractive after-cut appearance and overall turf health. Verticutting is the process of using vertically rotating blades to remove some of the horizontal growth and thatch that occurs around a grass plant. This process provides several benefits to the turf: it opens the turf canopy to allow for more sunlight exposure, it allows top-dressing to penetrate into the plant and soil more easily, and it forces the plant to stand up straight and focus plant energy on vertical growth rather than horizontal growth. This emphasis on vertical growth leads to a more uniform turf surface, which then leads to a higher quality of cut.—provided by The Toro Company. ■

OFTEN OVERLOOKED GRINDING ADVICE

TURF MANAGERS and technicians all seem to have their own ideas on when and how to grind reels. For some, their grinding philosophies are as guarded as a certain colonel's seven secret herbs and spices.

So, for an expert look at reel maintenance, we asked Erik Sides, training manager for Jacobsen Turf Equipment, to give a few basics superintendents and technicians should keep in mind when it's time to grind.

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New aerator model on market

Precision Welding has introduced its ProAerator commercial series of aerators in the USA. Available in four models with sizes ranging from working widths of 39" to 102", complete with closed spoon (core) tines or slicing blades which are independently mounted for easier turning and minimal turf damage. Mounted on a 1" steel shaft, tines are manufactured of temper-hardened steel and have oil impregnated Teflon-coated tine bearings with grease fittings for ease of maintenance and extended life. Commercial models are built using a welded 1 1/2" square solid steel frame with heavy duty expanded steel shields which serve as weight racks. Also available is an optional water tank for weight. Units are available with tow behind draw bar or Cat. 1, 3-point hitches. An optional tow-behind kit is available for use with all terrain vehicles.

Precision Welding



TurfMuncher field reclamation machine

Now turf manufacturers and field owners and builders have a sustainable alternative when it's time to replace existing turf field installations. TurfMuncher from Field-Away provides a cost-effective and efficient means of removing turf sports fields that need replacement. TurfMuncher offers an opportunity to reclaim and recycle used turf and infill. TurfMuncher is towed by a 25-hp hydrostatic drive tractor, and its hydraulics are powered by a separate 40-hp gasoline engine. After the turf field is pre-cut, TurfMuncher lifts the turf and infill in panels up to 15-feet wide and then separates up to 98% of the infill from the turf and deposits it into carts, buckets, or bags. Finally, the turf is rolled and doffed in rolls up to 250 feet. The TurfMuncher can reclaim up to 30,000 square feet of field turf per day.

FieldAway



Ariens' professional 36 Sno-Thro

Ariens Company offers the Professional 36 Sno-Thro with a 342cc Ariens Polar Force engine by Briggs & Stratton, which removes snow from sidewalks and large areas with its 36-inch clearing width. The all-steel, 16-inch serrated auger and three-blade, 14-inch steel impeller enhance clearing ability. A 50-foot discharge range ensures that snow lands outside of the clearing path of the machine. Automatic traction control optimizes maneuverability, and with no levers or triggers, steering is effortless. The Sno-Thro also features a 120-volt electric start with recoil backup, a 3.2 quart fuel capacity, 6 mph forward and 2 mph reverse speeds.

Ariens Company





New UTV plows from THE BOSS

THE BOSS UTV plows are available in two models, the 6'6" Power-V XT and the 6' Poly Straight-Blade Snowplow, and feature many of THE BOSS' Smart Technology systems for improved plow durability and performance. A High-Performance, Fully-Hydraulic System offers the highest blade lift height available for unmatched snow stacking capability. The hydraulic pumps are fully enclosed to protect against corrosion and hydraulic freeze-up. Operation of the hydraulic and electrical system is done with the touch of a button from inside the cab. A unique Sloped-Profile Undercarriage does not hinder ground clearance or inhibit trail riding when the snowplow is detached.

The BOSS



Sectional Sno-Plow for smaller equipment

Sectional Sno-Plow has developed a line of plows to be used with compact equipment. The LD plows are compatible with several types of lighter-duty equipment including backhoes, skid steers, compact loaders, and tractors. Designed by an experienced snow and ice management contractor, the LD snow pushers are ideal for facility managers and snow and ice control professionals.

Arctic Snow & Ice



Husqvarna snow throwers

The Husqvarna ST 121E single stage snow thrower has a 21" operating width and was developed for areas with moderate to heavy annual snowfall accumulation. With a SnowKing engine, levers on the control panel adjust the direction of the snow discharge chute. Armed with LED headlights, electric start and safety key switch for quick engine shutdown. Trac Drive dual-stage snow throwers (1827EXLT and 1830EXLT) include more standard features than comparably priced competitive units. Powerful LCT "SnowKing" 414cc engines on both the 27" and 30" operating width units provide the performance necessary for deeper snow drifts and greater transport speeds. Power steering, heated handles and convenient step bar for tilt back and easier transportation.

Husqvarna



Honda hybrid snowblower

The hybrid configuration of the HS1336i model combines a gasoline engine that simultaneously drives the snowblower auger/fan apparatus (clearing and throwing the snow) and charges the battery, with the electric motors (two in parallel) controlling the track drive forward propulsion. Equipped with the Honda iGX390 four-stroke engine, the operation of the HS1336i results in lower fuel consumption and lower emissions.

Honda Power Equipment



Pro-Tech introduces Sno Blower skid steer attachments

Pro-Tech introduces two new Sno Blower skid steer attachments as a complement to its line of Sno Pusher containment plows. The Sno Blowers are ideal for quickly moving large amounts of snow, especially when stacking or piling the snow is not an option. The line the BL72S (74.5 inches wide by 38.5 inches high) and the BL78S (38.5 inches high by 80.5 inches wide). Both models feature a 20-inch fan diameter, a 14-inch auger diameter, and a maximum throwing distance of 40 feet. Thanks to universal coupler mounts, they easily attach to skid steers from all major manufacturers.

Pro-Tech



SnowEx releases new V-Maxx spreader

SnowEx introduces the V-Maxx 8550 High Output spreader. Featuring higher material feed rates than other available V-Maxx spreaders, the new unit is ideal for snow and ice professionals looking to spread high volumes of sand in one pass, rather than making multiple passes to achieve a heavy application. Offering a 2-cubic-yard hopper capacity, the V-Maxx 8550 features a new transmission with a gear ratio of 40:1. This allows the unit to spread 295 to 680 pounds of material per minute (3.6 to 8.3 cubic feet per minute), which triples the rate of the comparable V-Maxx 8500 model.

SnowEx



Gravelly's PM-3084 triplex reel mower

Gravelly offers the PM-3084 triplex reel mower, as part of its specialty line. The PM-3084 features a Kawasaki 27-hp engine, 12-volt electric start, 7.5-gallon fuel capacity and hydraulic driven Legendary Locke reels. Gravelly's PM-3084 includes three 30-inch, double roller, full-floating hydraulic drive head assemblies and varying cutting heights from 0.5 to 2.5 inches. The mower also comes with standard ROPS installed. Additional features and benefits include: Yoke-style, dual rear-wheel steering to eliminate turf damage; one pedal forward, neutral and reverse for precise speed control; 24- x 11.5-12-inch turf tires for superior floatation for stability and a smoother ride; hydraulic lift for quick and easy transport; and 2-year warranty.

Gravelly Turf

For more information on any of these products, please visit www.greenmediaonline.com/productportal