



KEEP AN EYE ON MAINTENANCE FOR BEST RESULTS

It goes without saying that ride on mowers, especially the cylinder models used on greens, tees, surrounds and fairways, must be well maintained and set up correctly to produce the optimum cut. This short article is a reminder of the basic checks and procedures necessary to maintain a machine that remains on cut from the beginning to the end of the season.

James de Havilland reports

Many ride-on machines will have recently completed their winter overhaul, but if they have not been out of shed recently a few checks prior to their first use is a sensible precaution. It is never a good idea to assume every adjustment will be spot on. It is also easy to forget the basics too. Virtually every modern ride on mower has a diesel power unit and hydraulic drive to the cylinders. Whatever the make or model, it's really worth checking all of the hydraulic connectors for any sign of leakage. Who wants to be responsible for dumping gallons

of hot hydraulic fluid on the 18th green, just prior to an important early season tournament? Don't forget to check the fuel lines as well.

While in the engine compartment, check the battery. Make sure that the leads are fitted tightly and the terminals and connectors greased to prevent corrosion. Next check each cell for electrolyte and top up where necessary. A poor battery will typically make starting the mower difficult just when you least expect it. Although a service should have covered this, check the filter screen in front of the radiator as a matter of routine. If clogged with old clippings, remove with an airline or stiff brush. Check the fuel level in the tank and, if possible, verify that the fuel indicator gauge is working correctly. A false reading can lead to the machine stopping mid-mow.

It's also worth checking the instrument panel to ensure all gauges and indicators are working correctly. A faulty gauge will not stop the machine but if it fails to alert the operator to an overheating power unit, it could lead to an unnecessary repair bill. Also

check that all safety and operator presence systems are fully functioning. This should be part of the course risk assessment.

Cutting units

Once you are satisfied that the power unit is OK, it is time to look at the cutting units. These are obviously critical to determining the quality of your playing surface and there will be various elements to inspect and check, depending on the type of cylinder used.

First off, check the bottom blade. Make sure it is sharp and regrind if in doubt. If your cylinder manufacturer recommends an air gap, check the clearance between the reel and bottom blade with a feeler gauge and test the scissor action using a piece of paper. Remember, as Chris Perkins, Workshop Technician with Parks and Grounds Machinery, stated in the pedestrian mowers article last month, using the non-contact (air gap) method can reduce the wear on bottom blades by anything up to 50%.

Also it is most important to carry out cylinder/bottom blade adjustments before setting the height of cut. As either is adjusted, the height of cut is also changed. Check for worn bearings in the front and/or rear rollers. An accurate height of cut cannot be achieved if there is free play in these bearings.

Turf groomers cut the lateral growth of the grass and stand the blades up to ensure a very consistent finish. If groomers are fitted, one of the first jobs is to set the blade depth.

This is done using a setting bar, with companies that include and Ransomes Jacobsen recommending that the blades are set no more than 0.8 -1mm below the height of cut to avoid any risk of scalping or turf damage. The setting bolt should just touch the groomer blade and then be taken back just a fraction to avoid contact. This is done at both ends of the unit to ensure a consistent depth is achieved. This is a workshop, as opposed to 'on the green', operation.

The Jacobsen groomer also features a course adjustment lever which, when released, stops the grooming process by moving the blades up and away from the grass. However, it continues to run to help keep the grooved front roller free of debris. These details differ between makes and models, so do not assume this applies, particularly if a recent swap between models has been made.

Ransomes Jacobsen and the other leading suppliers including John Deere and Toro,

also recommend that rear roller brushes are fitted as they will keep the roller clean and help maintain a consistent height of cut. The Jacobsen designs are belt-driven and the belt tension should be checked to ensure they are functioning correctly.

Don't forget that these checks have to be done on all cylinders and groomers. On a greens/tees triple or five unit fairway mower, it's very easy to 'forget' the rear units, especially if it's not the swing-out type and difficult to access.

Finally, check the roller and cylinder bearings periodically. Look for play when spun, any unusual noises or any tightening

as they rotate. If any anomalies are found, do not take the machine out. Consult your mechanic or local dealer.

Regular checks and routine maintenance are not 'rocket science', but they are essential for producing excellent sports turf. In a profession where greens staff are often maligned it is essential that equipment is kept in the best possible condition to give you the opportunity to refute the myth, that you 'simply cut grass.'

With thanks to Nigel Church, Ransomes Jacobsen.



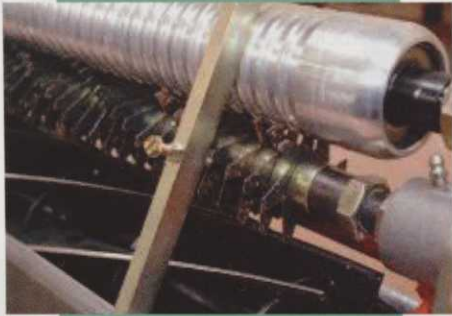
A fairway mower will benefit from regular setting and maintenance checks, little and often care improving mowing results and reducing overall operating costs.



Powered brushes keep the rear roller clean and maintain height of cut



The belt of the rear roller brush drive should be checked to ensure correct tension



Set blades no more than 2-3mm below height of cut



The course adjustment lever stops the grooming process. However, it continues to run and helps keep the grooved front roller free of debris



Make sure that battery leads are fitted tightly. Grease terminals and connectors to prevent corrosion. Check cells for electrolyte and top up where necessary



Check all of the hydraulic connectors for any sign of leakage



On a greens/tees triple or five unit fairway mower, it's easy to 'forget' the rear units, especially if it's not the swing-out type and difficult to access



The setting bolt should just touch the groomer blade and then be taken back just a fraction to avoid contact



Turf groomers cut the lateral growth of the grass and stand the blades up to ensure a very consistent finish



Ensure all gauges and indicators are working correctly