



Cold snap coming

When it comes to gearing up for winter, it makes sense to take some top tips from those whose businesses are focused on little else. Keith Read reports

How is it that, in countries routinely covered by a blanket of snow throughout winter, planes still take off and land mostly without delays, trains still generally run on time and, critically, road transport continues to function – albeit perhaps more slowly? Is it just that they get the right sort of snow, while we – when we do get it – experience the wrong type? Or is it more fundamental: a weakness in planning identified by Baden Powell with the aide memoire for all scouts everywhere, ‘Be prepared’?

It doesn’t take a genius to conclude that being prepared for snow and hazardous conditions in winter is what keeps other nations on the move, while sitting back and thinking that winter in the UK is just a colder, damper version of summer tends to catch us out. However, perhaps the past two winters – starting back in 2010 when we famously saw that

satellite picture of Britain totally covered in the white stuff – have taught us a lesson?

Someone who knows all about being prepared for winter is Chris Grime, principal fleet engineer at Lancashire County Council. Among his many roles, he is responsible for maintenance of the council’s fleet of 64 gritters that have to be ready to move at a moment’s notice, any time between the middle of October and mid-April – the ‘official’ winter period for this area. And his preparations for the coming winter started almost as soon as the 2011/12 snow and ice melted.

Most transport engineers won’t have a dedicated fleet of vehicles designed only to operate during winter. But they can still heed the wealth of experience that Grime and other emergency service operators are happy to share, if they want to keep their shows on the road when the weather turns less

“Colder weather can affect engine cranking, calling for extra amperage from the battery”
Chris Grime



than hospitable. Grime says many pre-winter checks amount to a redoubling of routine inspection and maintenance. However, they should take on added importance ahead of plunging temperatures.

“Make sure air driers have been serviced, filters have been changed and you’re getting clean, moisture-free air in the system, so you can avoid the potential for brakes to freeze up,” he advises. “Also, ensure that fuel in bulk tanks has appropriate additives to prevent waxing.”

Fluids and fuel

Sometimes, gas-oil tanks that hold fuel for machines used in the depot get overlooked. Grime recommends dosing and cleaning them out. “Matter can clog filters and make life difficult. We’ve seen the results of bio-diesel in our tanks, which has meant performing a full clean-out to get rid of build-up. Even Derv tanks will have seen an element of bio-diesel, so it’s definitely worth having a sample of your diesel taken and checked prior to winter.”

Making sure that anti-freeze concentration is adequate and that screen-washer fluid is protected should be second nature. Grime’s money- and frustration-saving tip here is to buy bulk washer-fluid early, while it is available. He is also testing a washer bottle and pipework heating system for extra protection. “Don’t forget that wipers need to be in good condition, too. How many times has the first

Driver and yard preparation

Preparing drivers for winter is one aspect some operators forget. Chris Grime, principal fleet engineer at Lancashire County Council, states that none of his gritters leaves the depot without a minimum of first aid kit, torch, shovel and survival blanket. And his drivers invariably add their own survival packs, usually comprising a flask of hot drink, food and a mobile phone.

To keep crews safe from exposure, Grime says cab heater systems must be checked – both standard vehicle heating and ventilation systems, and any additional night heaters. “Any filters should be checked. If they’re blocked, air-flow will be restricted, and efficiency of the heater and de-mister will be impaired,” he warns.

He also recommends that transport managers get in a stock of salt or grit to make the depot safe. “You can buy inexpensive push-along spreaders, similar to those gardeners use for fertiliser. They’re better than a shovel. Those with lift trucks can also buy plough attachments that fit on the forks.”

Many 4x4s, pick-up trucks and quad-bikes can also be fitted with snow ploughs to clear yards and parking areas. Louise Haidar, of Oundle-based TBR Accessories, says prices vary from £1,500 for the firm’s manual Snowsport plough to £5,000 for the SnoWay hydraulically-driven model.

“Each plough needs a vehicle mount and these vary in price, due to the complexity of vehicle axles – from £220 on a Discovery 2 to about £680. We charge £500 per vehicle, plus travel expenses, [to fit] SnoWay ploughs or we can fit them at our facility, which is fairly central to most people in the UK.”



real frost seen the wiper arm at one side of the screen and the blade firmly stuck to the other side?”

Batteries are high on his list of essentials, too. “Colder weather can affect engine cranking, calling for extra amperage from the battery,” he warns.

That’s a point well understood by Fraser Wakerley, managing director of JHM Butt, distributor of Ceteor booster packs. “If you run a professional operation, you need a professional pack – one powerful enough for the job. Some commercial vehicle or PSV [passenger service vehicle] booster packs are advertised as providing 1,600A [24V]. That sounds really powerful, but it isn’t. Unfortunately, peak amps don’t start a vehicle. You need cranking amps [CA] – between 800 and 1,200CA. A booster with 1,600 peak amps is only likely to deliver around 375CA.”

Electrics and traction

Wakerley advises that booster packs should be designed to remain on charge 24 hours a day, 365 days a year. To facilitate this, the three-model Ceteor range – costing between £1,059 and £1,450 – comes with a purpose-designed docking station. “These are not the cheapest units. But performance, not the price, is much more relevant when you have a large CV that won’t start and a journey to make.”

Moving on, loss of traction was shown, during the two most recent harsh winters, to be a major problem. It sparked huge interest in winter tyres, which are common – even compulsory in some alpine regions – throughout Europe, but previously almost unheard of in the UK.

Grime says good traction tyres on the driven axle of HGVs are essential, although he has yet to fit winter tyres to the council’s gritter fleet. When it

What about snow chains?

Conventional snow chains – once the only effective means of getting a grip on snow – have almost disappeared. But an effective, effortless modern interpretation, very popular in Norway, could keep essential services moving, even in the worst of weather. Onspot is an automatic snow chain system that can be activated at speeds up to 30mph.

“In effect, it’s an automatic traction control system,” explains Howard Ostle, sales and marketing manager at Warrington-based VBG Group Sales. “Onspot works when a wheel fitted with several chains is [hydraulically] lowered down to the driving wheels. The chains are then drawn in under the driving wheels and increase the friction.”

Onspot is effective even when reversing. The standard kit, supplied and fitted to a truck or bus with its own air supply, costs in the region of £2,300. For a small truck or ambulance requiring an air compressor, the fitted cost would be closer to £3,000.

comes to LCVs that fall in the have-to-get-there category, he’s all for winter tyres, though. “They are worth serious consideration,” he says.

Goodyear Dunlop’s truck tyre marketing director Boris Stevanovic puts the case even more strongly. “Winter tyres are not an option; they are a need. It is all about safety and ensuring commercial vehicles can continue to meet tight schedules without hindrance, regardless of weather conditions.”

Dave Baldwin, head of operations at Bullwell Trailer Solutions, says ignoring advice and failing to prepare for winter is plain madness. “It’s important that we learn from all sectors in the transport industry, including local authorities and emergency services, and take advice on how best to prepare fleets for colder weather. New technology, techniques and practices will help us avoid the chaos we have seen on the roads in previous years.” TE

A better way to look after discs

The Highways Agency, Amey, several county councils and an increasing number of fleet operators have found a better way to prepare their disc brakes for winter. They claim they’re saving tens of thousands of pounds – and it’s not only for gritters and snow ploughs.

The secret is Pro-Cut’s on-truck brake lathe. Standard practice for maintaining gritter trucks before this machine was often to change out brake discs during summer maintenance. With parts costing £130 per axle, plus around four hours’ labour at £35 per hour, the total cost per axle was some £270.

Using the brake lathe, the job takes just 45 minutes – so saving £240 per axle. In addition, the vehicle is back on the road faster – which matters for general haulage – and is going to pass its MOT test.

How does it work? Using an adaptor, the lathe fits directly onto the vehicle’s hub, so only the wheel needs to be removed, not the disc. The lathe, which turns the hub in-situ, skims a small amount off both the outer and inner surfaces of each disc. Disc thickness is only slightly reduced and, importantly, the remaining surface is flat, free from corrosion and, when new pads are fitted, ensures optimum braking efficiency.

