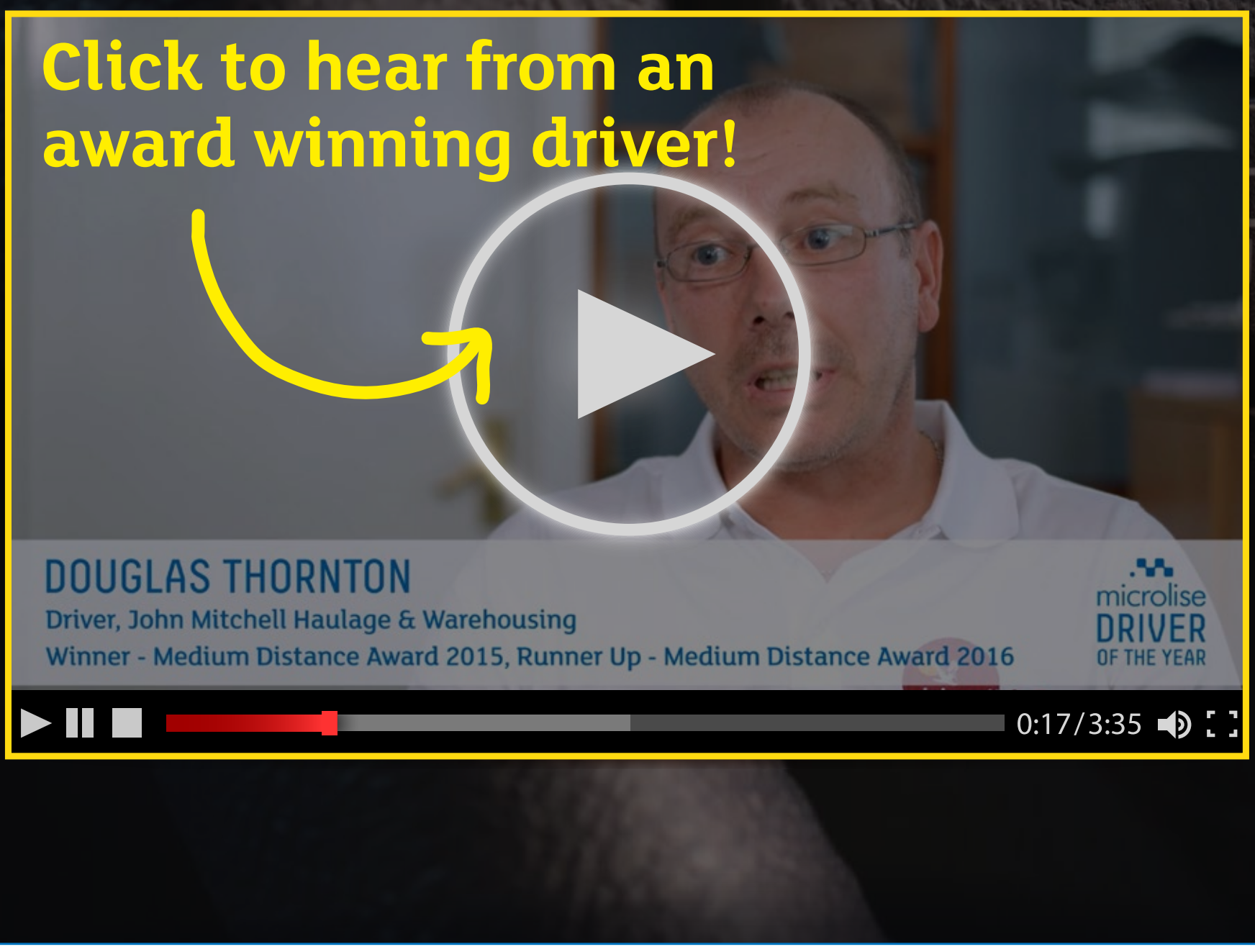
microlise

IMPROVING MPG & YOUR DRIVING SCORE

Click to hear from an award winning driver!



NEXT

INTRODUCTION

The smallest improvements in driving style, when repeated, can mean big reductions in the amount of fuel burned, CO2 emitted and money spent by any transport operation.

Whilst the ‘real world’ is often far removed from what is technically an ideal scenario, we’ve tried to give you some hints and tips to help you to improve your driving, especially in relation to using the Microlise system.

There will undoubtedly be many items here that you’ll already use as part of your day-to-day driving style, but keep reading as you may just pick up a nugget!

At Microlise, we have analysed millions of miles of HGV driving data and have learned which small improvements result in the greatest cost and fuel savings and we are always aiming to improve our products to take the ‘real world’ into account where possible.

We’ve condensed our findings into these seven Microlise top tips, which we hope you will find useful.

Remember, a change that may seem insignificant on its own, could have wide-ranging and largescale results when carried out often and everywhere.

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WHAT IS GREENBAND DRIVING?

Greenband driving is a measure of the use of the most efficient range of the engine. Higher green band values will mean the driver has reduced the amount of fuel used by the vehicle. The most economical range differs from engine to engine meaning that each make, model and model year will have a different green band range. Most trucks will have a green area clearly indicated on the rev counter but it's usually between 800 - 1700 RPM on larger HGV vehicles.

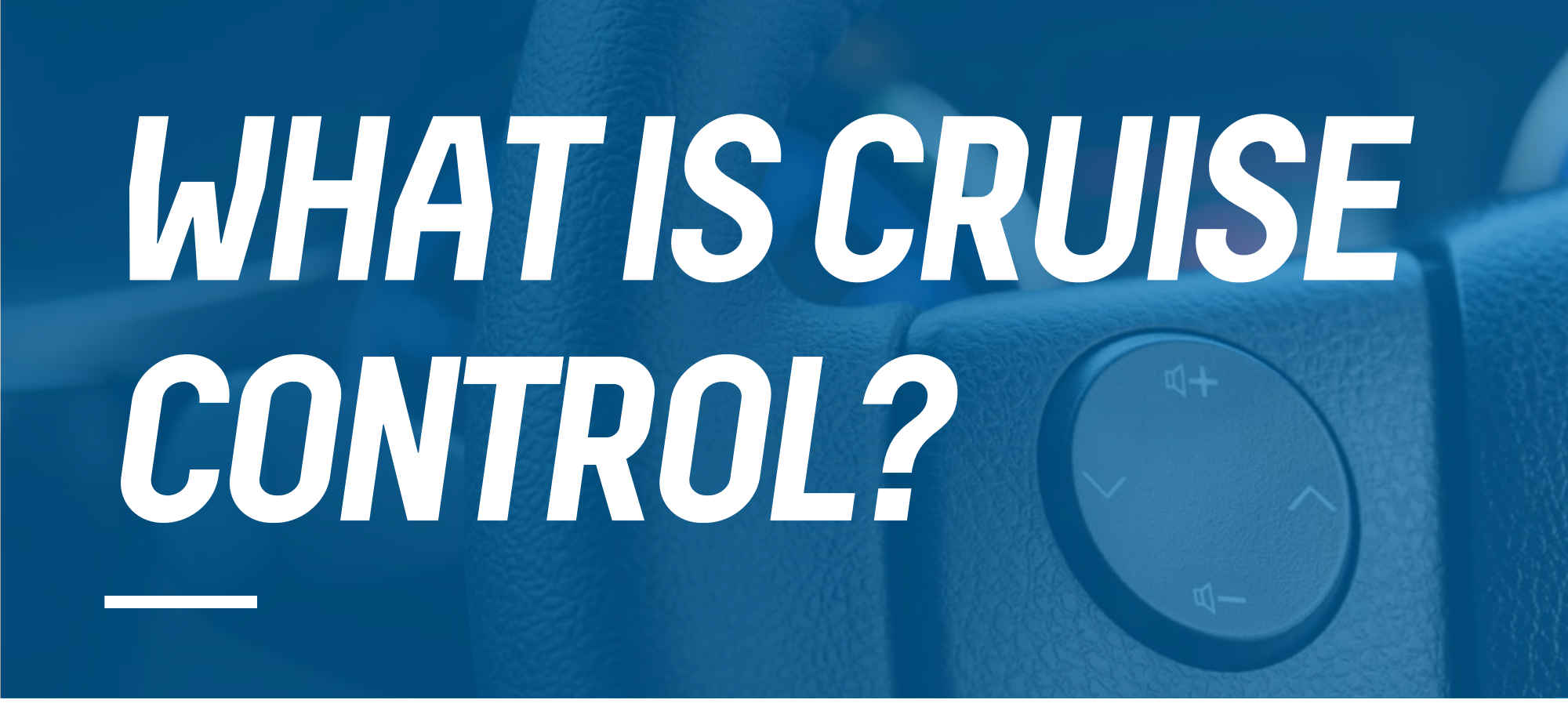
There are some variables though – load for example, will have an effect on your greenband driving whilst engine management systems on many new automatic vehicles can take control out of your hands. However, simply being aware of what it is can help.

GREENBAND DRIVING

THE MICROLISE TOP TIP

Where possible, keep the needle within the greenband whilst accelerating in a controlled fashion for optimum performance.

The biggest effect on your greenband driving score will occur at cruising speeds so try to use cruise control wherever possible and use momentum to your advantage to improve overrun.



WHAT IS CRUISE CONTROL?

Where vehicles spend large amounts of time on major trunk roads and motorways cruise control can be very effective at reducing fuel consumption.

This is because the engine is able to optimise its fuel use without responding to an ever-moving accelerator pedal. Many trucks have optimised cruise control which will maintain a constant speed, taking advantage of momentum.

CRUISE CONTROL

THE MICROLISE TOP TIP

Trust your cruise control – especially on hilly terrain where it may sound like the vehicle is unnecessarily using higher revs. In addition, perhaps review your route in advance to identify areas where cruise control could be employed.

New vehicle technology is an ever changing landscape. If you have a new vehicle, especially one with adaptive cruise, and you're unsure of any aspect of using its cruise control, talk to your manager or driver trainer for guidance.

WHAT IS OVERRUN?

Overrun is good coasting with the vehicle's gears engaged. It is indicative of driver awareness and forward thinking as drivers can use the momentum of the vehicle to maintain speed whilst approaching traffic signals and roundabouts.

In gear coasting used regularly can drastically reduce brake wear and tear as the engine is used to gradually reduce vehicle speed.

OVERRUN

THE MICROLISE TOP TIP

Try to use in gear coasting when approaching traffic signals and roundabouts. The ideal scenario would be to use the engine will slow the vehicle sufficiently. The real world scenario requires you to judge the road conditions and distance to try where possible, to avoid bringing the vehicle to a complete stop.

Always be sure to disengage cruise control. Take your foot off the accelerator pedal and allow the engine to slow the vehicle gradually whilst at the same time, covering the brake pedal as a precaution.

This is particularly useful when approaching roundabouts with good visibility of traffic flow and while approaching traffic lights. On motorways, maintain a good distance between you and the vehicle ahead can help you to keep your vehicle moving in slow traffic.

Each company is set up with varying trigger points and parameters in line with what that company wants to achieve so ask your transport manager if you wish to know more about the parameters you're being

WHAT IS IDLING?

Idling refers to running a vehicle's engine when the vehicle is not in motion. This commonly occurs when drivers are at a standstill in heavy traffic, waiting while parked outside a business or residence, or otherwise stationary with the engine running.

Microlise records engine idling when the engine has been running whilst stationary for 3 minutes which allows for temporary stops such as traffic lights though settings will tend to vary. Speak to your manager for more information about the parameters set for your company.

IDLING

THE MICROLISE TOP TIP

A vehicle may consume up to 3-4 litres of fuel in an hour whilst idling so it affects fuel consumption considerably – and it's largely unnecessary. Always try to ensure the vehicle engine is not running when the truck is at a standstill, e.g. at a depot, at sites, or during rest breaks.

In winter, try to anticipate your next break stop by getting the cab to the right temperature whilst driving then engaging the night heater to maintain the temperature whilst on break. At around £700 fitted, perhaps suggest retro fitment if your vehicle doesn't have a night heater.

WHAT IS HARSH BRAKING?

Harsh braking is the sudden reduction of the speed of your vehicle which is deemed to be excessive. Its likely cause is bad forward planning for the situation ahead, which may be rounadabouts, traffic lights or junctions.

Whilst harsh braking instances are flagged as a safety infringement, they are often followed by harsh acceleration as a reaction which impacts fuel consumption. Needless to say, frequent harsh braking has a direct effect on the lifespan of braking systems.

HARSH BRAKING

THE MICROLISE TOP TIP

Whilst there are situations where an instance is unavoidable, harsh braking can be reduced by good forward observation, anticipation and driver planning for hazards and obstacles on the route.

Try to use in gear coasting when possible and judge the road conditions and distances to reduce use of the brakes.

WHAT IS OVER-REVVING?

Over-revving is defined as using excessive revs, especially in low gears, for a prolonged duration. With modern Diesel engines, the available torque commonly falls away outside the green band upper limit meaning that any over revving is burning additional fuel unnecessarily and increasing engine wear and tear.

OVER-REVVING

THE MICROLISE TOP TIP

Try to ensure effective gear selection by increasing the accelerator gradually. Where possible, try to ensure that your revs do not exceed the green band indicator on your rev counter and that the engine does not spend time at high revs.

WHAT IS OVERSPEEDING?

When a vehicle exceeds a predetermined top speed for a predetermined period the telematics solution on board recognises the occurrence and logs an overspeeding incident.

The optimum cruise speed for vehicles is often around 56 MPH and anything over this results in greater fuel consumption.

However, some vehicles are limited to a fixed top speed. If a vehicle's speed is limited, chances are there are no over speeding parameters set.

OVERSPEEDING

THE MICROLISE TOP TIP

Clearly, monitoring your speedometer is a good place to begin – Always ensure you stay below the national speed limit for your vehicle weight.

Try to use cruise control wherever possible which will allow the engine to optimise its fuel use without responding to an ever-moving accelerator pedal and easily help you to stay below speed limits.

WHAT IS HARSH CORNERING?

Harsh cornering is the change of direction that is severe enough to potentially cause your load to shift, or in worst cases, your vehicle to overturn.

Its likely cause is bad forward planning for conditions ahead, such as roundabouts, traffic lights or junctions.

There are obvious safety issues around harsh cornering instances but it also has an adverse effect on the wear and tear of both vehicle and where applicable, trailers.

HARSH CORNERING

THE MICROLISE TOP TIP

Anticipation is key... The ideal scenario would be to anticipate the road ahead slowing down to an appropriate speed before entering turnings, sharp bends and roundabouts. Whilst we understand that the real world isn’t always quite as simple, it’s always worth making this outlook the basis of your driving style.

It’s also worth noting that your manager should be well versed with the requirements so if you have any questions, or if you feel you require further training, you should ask.

THANK YOU FOR READING

We hope you have found the content useful. Use the driving tips to improve your safety & overall driving performance.

For further information & training resources please visit:

MICROLISE.COM