



STANDARD SETTERS

With the latest safety technology as standard, great performance, improved fuel economy, free servicing for half a million kilometres and an entry price of \$240,000, what's not to like about the all-new Euro 6 Scania B-double haulers? *Steve Skinner* goes for a spin

IMAGINE THE BENEFIT of getting a few seconds' warning that you're going to hit something you haven't noticed in the dark, rain, fog, smoke, dust or heavy city traffic.

Then if you fail to act in time because you're too tired, imagine the truck cutting the throttle and hitting the brakes all by itself. You might still hit the camel, tree, pole or other vehicle, but a lot of speed will have been washed off.

Rolling out this amazing radar and camera-based autonomous emergency braking technology on Australia's truck fleet could save nearly 70 lives a year.

That startling statistic was produced by Monash University's Accident Research Centre a few years ago.

It's one of the reasons the Australian Trucking Association wants to see emergency braking in all new trucks. It's hardly a radical idea — Europe

actually mandated this cutting-edge technology back in 2015.

Most of the heavy duty truck suppliers in Australia offer this computer-controlled emergency braking, but usually as an option. Not so with Scania. In its "New Truck Generation", automatic braking is standard.

And Scania is so confident of its updated technology that the driver can't turn off the "advanced emergency braking" (or AEB) function even if they wanted to.

There are several more great safety features as standard on Scania's, which lead the company to claim that its new trucks are the safest in the world.

Not only are there driver and passenger airbags, but side curtain airbags as well. The new and all-steel cab exceeds Swedish safety standards, which exceed the European standards. Adaptive cruise control keeps you a set distance from vehicles in

front, downhill cruise control stops over-runs, electronic stability and traction control help you stay glued to the road and lane departure warning alerts you if you start veering across painted lines without the blinkers on.

This story might be starting to sound like an advertisement for "new age" gimmickry. But the safety gear is just one of the reasons the accolades have been consistent since the new model Scania's were introduced in Australia early last year after a global launch in late 2016.

The new generation Scania won Europe's Truck of the Year in 2017 and a 13-litre R450 won the Green Truck 2019 award run by German trade publications thanks to its fuel efficiency. Sales have been strong internationally and the independent reviews have been very positive.

ATN and Owner/Driver technical editor Steve Brooks was impressed last year with a test drive of

the Euro 5 G500 and R620 models up the Hume Highway from Sydney to Melbourne. With Steve unavailable, Scania hosted this writer in Melbourne for test drives of two new Euro 6 B-double units along the Western Highway.

Raw Power

You can't beat the growl of a powerful V8 truck engine, which Scania has been building for 50 years. The V8 in the R650 sounds just right inside the cab, but is remarkably quiet on the outside.

The 16.4-litre power plant has a mighty 3,300Nm of torque — which is 300Nm more than the Euro 5 Scania R620, 150Nm more than the arch-rival Volvo FH 16 rated to 700hp (522kW), and only 200Nm less than the flagship 730hp (544kW) Scania.

So pulling 61 tonnes of cement blocks from Melbourne to Nhill seemed like a piece of cake. The big Scania marched up the hills, was overtaken by loaded trucks only twice — both times single trailers — and didn't drop below 50km/h on the Pentlands between Melbourne and Ballarat.

That's while still returning 1.7 kilometres to the litre at full noise, and with a lot of slowing, stopping and starting for roadworks and photos as well as a city traffic jam.

Scania says the new V8s are between 7 and 10 per cent more fuel efficient than the previous generation. That's courtesy of factors such as a new turbo system; major changes to the air intake and fuel injection systems; reduced friction; reduced "parasitic losses" of energy by less running of the fuel, oil and water pumps; and improved aerodynamics.

And how you drive them is also important, with one of the keys being to lift off the accelerator or jump out of cruise control when you know you're coming up to a town speed limit, for example. It really is incredible how well these big things will then roll along on idle on the flat, thanks to the combination of momentum and a relatively low-friction driveline.

Despite that, I didn't get abused once by the trucks behind me, perhaps because they knew they were saving fuel and unnecessary wear and tear on their brakes as well.

Above: The R650 eats up the highway miles with 3,300Nm of torque



“Downhill cruise control means you can keep your eyes on the road rather than checking the speedo all the way down hills.”



Top: Car-like dash in the R-series

Above: Combined lounge/bedroom in the R650 at Nhill

Left: Scania driver trainer Dave Whyte is a veteran of Victoria's Western Highway

I love adaptive cruise control on any truck (but you can't be complacent, especially when cars are merging from your left, out of range of the camera and radar). And downhill cruise control means you can keep your eyes on the road rather than checking the speedo all the way down hills.

The GPS-based predictive cruise control is unbelievable. It knows when to cut power just before the crest of a hill, and on the other hand when to hit the power just before the bottom of a hill to give you a good run-up.

Meanwhile there were no nasty shocks arising from either the emergency braking or the electronic stability control activating when they weren't supposed to.

The 12-speed (plus two crawlers) automated manual gearbox feels almost as fast as a full automatic, and this big unit will drop a couple of gears at once on a hill without missing a beat. This is all thanks to a layshaft brake (whatever that is) which Scania says enables 40 per cent quicker gear changes.



Comfort in the cab

Hitting the bumps on some of the single-lane parts of the Western Highway near both Horsham and Dimboola must be what it's like when you hit the ejector button on a fighter jet.

Not that the driver suffers in these extremely comfortable machines, partly thanks to the airbag cab suspension.

Riding shotgun was Scania driver trainer Dave Whyte who drove this road for years, including in his own B-double car-carrier. He always slowed down to 90km/h, to minimise the harm to both truck and freight: "I would hate to think of the damage it's doing to people's trucks every night of the week."

In 2007, aged 28, Dave won the first Scania Young Australian Truck Driver of the Year competition, collecting a new P420 prime mover for his efforts. He and his colleagues provide technology lessons to all new drivers with every purchase.

These new cabs have double door insulation and tough glass, so I decided to test their soundproofing out by parking up for the night in the noisiest spot I could find at the spacious Nhill changeover pad. (The result was never going to be ideal, but I still got a reasonable sleep.)

At one stage the pilot of a new G500 emerged from the gloom and asked for a look inside the slightly higher R cab. I asked what the driver thought of their truck: "I love it. It's magic," came the reply.

These R-series "Normal" cabs have a 15cm floor in the middle, and not being the "Highline" option, I had to duck my head slightly when standing. The extendable and comfortable pocket spring mattress is a generous metre wide in the middle, which still leaves standing room. And once you let all the air out of



Top: The multi-tasking R500 is just at home on the freeway, on a country road or around town

Above: Not much room to move on the Ballan-Geelong Road

Below: LED lights are easier on the driver's eyes



"I deliberately dropped off a rough edge on one occasion and felt completely stable and in control."

the driver's seat, you can easily sit and put on your boots in the footwell.

It's no Kenworth Big Cab or Volvo XXL but I reckon drivers much bigger than my 177cm and 75kg would still have a comfortable and relatively quiet home away from home. A bonus is the black leather trim and fridge as standard (with a freezer option).

Smaller-engined sibling

The versatile linehaul, regional or urban distribution B-double or single-trailer Scania R500 has an upgraded 500hp (368kW) 13-litre engine with 2,550Nm of torque. That puts it slightly ahead of a couple of competitors on grunt, and slightly behind a couple of others.

The gradual climb from Laverton to Ballan near Ballarat with the same trailers at nearly 61 tonnes in a strong headwind was nothing to write home about. However the combination only dipped below 40km/h once on the Pentlands, and the engine fan didn't come on at all.

For this shorter trip a southern mate had recommended a triangle via the very ordinary and often narrow single lane road from Ballan to Geelong, to experience a few hills, tight bends and a bit of rough stuff.

I haven't had so much fun in a truck in years. The R500 steered and handled magnificently, and the Freighter trailers tracked beautifully.

I deliberately dropped off a rough edge on one occasion and felt completely stable and in control. These trucks might be built in Europe, but Scania says they are designed to handle the worst that Australian, Russian or Latin American roads can throw at them.

Meanwhile the hydraulic transmission retarder is awesome, and means you don't have to touch the now-bigger disc brakes at all. The retarder uses the same big cooling package as the engine, and is remarkably quiet.

Fuel use on this short mixed trip was also 1.7 km to the litre, but Scania says during a week of linehaul test drives last year at nearly the same weight, the similar Euro 5 version was returning more than 2km/L.



Scania R650

Engine: 16.4 litre V8

Outputs: 650hp (485kW); 3,300Nm torque

Emission Control: Euro 6 SCR

Transmission: Opticruise overdrive 14-speed AMT (2 crawlers)

Retarder: R4100 (plus exhaust brake)

Rear axle ratio: 3.42

Front suspension: parabolic leaf spring (air bag option)

Wheelbase: 3.8m

Fuel tanks: 1,000 litres with an extra 200 litre option

Scania R500

Engine: 12.7 litre six-cylinder

Outputs: 500hp (368kW); 2,550Nm torque

Emission Control: Euro 6 SCR

Transmission: Opticruise direct 12-speed AMT (plus 2 crawlers)

Retarder: R3500 (plus exhaust brake)

Rear axle ratio: 3.42

Front suspension: parabolic leaf spring (air bag option)

Wheelbase: 3.8m

Fuel tanks: 1,000 litres with an extra 200 litre option

The bottom line

There's another reason to be tempted by the new Scania: free servicing for half a million kilometres or five years. (Servicing is based on real-time vehicle working data, not kilometres.)

For an outlay of around \$240,000 plus GST and on-road costs for the R500, or \$265,000 plus GST and on-roads for the R650, that's got to be a tempting deal for retail buyers.

Driveline warranty is three years. If you want longer peace of mind – and also reckon you'll run up the free servicing 500,000km in a couple of years – there are the popular Scania Repair and Maintenance agreements.

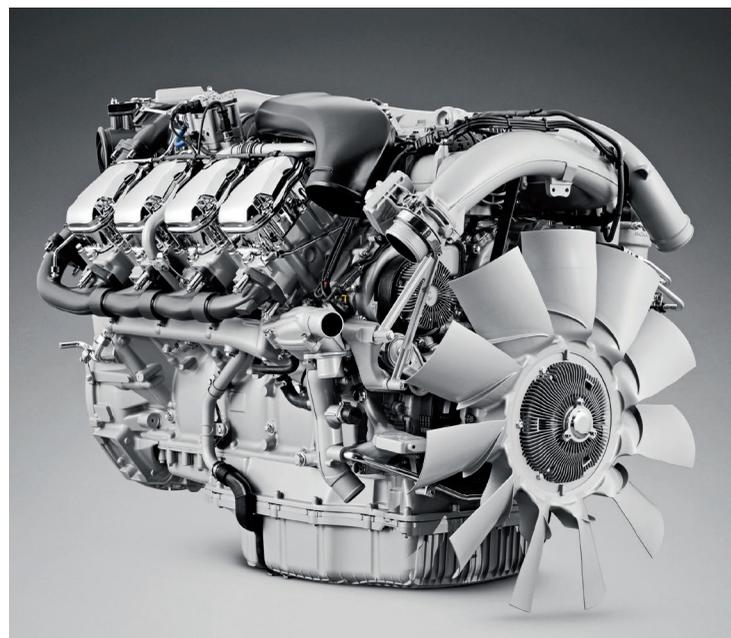
"It's not about making money anymore, it's about saving money," said my R500 trip companion Simon Parker, Scania sales manager for Victoria, South Australia and Tasmania.

"Margins are getting narrower and narrower, so people need to look at reducing their costs, so Repair and Maintenance is a big part of that.

"If you know what your costs are, and know what your revenue is, bingo – the bit in the middle is yours. You don't get any \$40,000 surprises. More and more people are doing that."

Complaints

The only problem I could see has nothing to do with the trucks themselves. It was disappointing to discover that the ageing Laverton dealership which supplied the demo trucks has no bunkrooms for waiting long-distance or



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overnight drivers needing to sleep.

In contrast the admittedly much newer Westar Truck Centre at nearby Derrimut (Isuzu, Iveco, MAN and Western Star) caters for both local and long distance drivers with four individual bunkrooms featuring sound insulation, en suite toilet and shower, and linen.

A minor complaint about the new trucks is that the fantastic suite of standard safety features doesn't include blind spot warning, which alerts you if you have the left blinker on and there is a vehicle on your inside. It's a noise which might annoy some drivers but this driver is paranoid about city cars, which can occasionally sneak up undetected by a quick glance in the spotter mirrors.

A petty quibble is that the plastic interlock valve knob thingy pulled right off (but could be easily fitted back in). Mind you, that system is terrific. Located just below the parking brake, when you pull it out you can supply air to the trailer maxi spring brakes without having to also release the prime mover maxi brakes – which means once you build up air and the trailer brakes release, there's no chance of the whole combination rolling off.

Another important maxi brakes feature is that if you haven't applied the parking brake and open a door, the horn goes off.

Verdict

These magnificent machines are a good-news safety story and appear to be great value for money in getting the job done. 🚛

Above: Oops: Scania claims it has the world's safest truck

Left: Scania's 16 litre V8 donk

Opposite: Scania's Simon Parker at Anakie on Ballan Road