

Scania's New Generation R and S-series may have more charisma, but its latest P and L-series urban chassis have the qualities to deliver on inner-city driveability, safety and emissions, as Brian Weatherley found in a test drive

Urbane urban WARRIORS

Last December, Scania completed its 'New Generation' range renaissance with the arrival of its L-series low-entry chassis, following the earlier launch of its P-series urban distribution models. While Scania previously offered a low-entry version based on the old P cab, it never pushed it hard, at least in the UK. But with TfL's Direct Vision Standard fast approaching, that's bound to change, as L-series can achieve the highest five-star rating (see also pp12-15). Indeed, Scania's pre-sales technical manager Phil Rootham reports that, in addition to expected L-series enquiries from municipal customers, he's also had calls from operators interested in tipper and tractor versions.

When the P-series was launched in September, it was accompanied by a new DC07 7-litre engine (based on Cummins' popular 6.7-litre B-Series block but developed extensively by Scania) rated at 217bhp, 247bhp and 276bhp. DC07 offers a number of advantages over its 9-litre DC09 stablemate, not least a 360kg weight saving and fuel savings of between 4-7% versus the latest updated DC09, and up to 10% on the previous-generation engine. It will be cheaper than a 9-litre, too.

Because the DC07 expected to be a popular power choice in P-series urban delivery chassis, a laden box-bodied P220 18-tonner with a low-roof extended day-cab (pictured, p20) was tried out. This model, featuring the smallest DC07



coupled to Scania's GR875 eight-speed box with the two-pedal Opticruise automated function, is the likely default choice on RHD P-series chassis.

Like its larger S, R and G stablemates, the P cab's driving position has been moved 65mm closer to the windscreen and 20mm nearer to the door. Aided by lower window lines, a revised dash and slimmer A-posts, the changes provided excellent all-round vision, which will be doubtless welcomed by drivers trying to spot vulnerable road users. Scania's optional City Safe window on the lower quadrant of the passenger door (also shown p20) offers additional direct vision, although a passenger's legs can end up blocking that view. (And in the City Safe door, neither window opens.)

On the road, the engine pulled

particularly strongly around 1,400rpm (1,000Nm torque available from 1,050-1,500rpm). It seemed well-matched to the transmission, too, as changes were rapid and smooth. Unless the delivery operation involves additional motorway running, or hilly terrain, the need for any more power, or gears, seemed questionable. And even when working hard it was quiet inside.

TIPPER

By way of comparison, an 18-tonne P-series 4x2 tipper with the most powerful 276bhp DC07 engine, coupled to the GRS895 12-speed box was then tested. Not surprisingly, its extra power and 200Nm extra torque provided a brisk journey. But in congested city streets, that advantage might be lost.

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Along with offering an optional electric park brake, Scania has revised its hill-hold system. Previously, once the driver had applied the foot brake the service brakes remained on for 3-5 seconds before automatically releasing. However, with the new ‘Auto Hold’ (available on all Scania models), when the service brakes are applied on a gradient, they remain on until the driver presses the throttle, and the system senses the clutch is fully engaged. It was attractive, not least as it provides more control when restarting on a slope. If stationary for a longer period, the system automatically transitions from Auto Hold (which uses the service brakes) to the parking brake (which uses the spring brakes and displays the usual red parking brake symbol).

The P220 reviewed was fuelled with HVO (hydrogenated vegetable oil) biodiesel, one of the five alternative fuels being promoted by Scania. There’s no discernible difference in driveability or performance between HVO and conventional diesel, not least as HVO’s calorific value is virtually the same. However, HVO offers significant reductions in CO₂ – of up to 90% (well-to-wheel per driven kilometre), but NO_x and particulates levels are similar.

Fitting the 7-litre engine under the P-series cab results in a significantly lower engine hump (by 95mm) compared to the height of the engine tunnel above a DC09 engine. So it’s easier to slide over to the nearside door. The P-series cab’s durable light/dark grey trim is well-suited to intensive delivery operations, and is on par with its heavyweight siblings.



RCV

The final vehicle tested was a low-entry L320 6x2 rear-steer chassis with Scania’s updated 9-litre engine, coupled to a six-speed Allison box (pictured p19). On the back was a refuse collection body; waste transport clearly being one of the target markets for the L-series. If the latest P-cab has already opened up drivers’ sight lines considerably, lowering the driving position on the L-series by 220mm (the cab also moves forward 550mm) places them even closer to the action at street level. They are nearly at the same eye level as a pedestrian or cyclist. While low-entry chassis aren’t the only answer for reducing collisions with vulnerable road users, there’s no denying the L-series cab’s first-rate all-round vision.

Speaking of running heights, the L-series’ standard air-suspended front axle can also be ordered with an optional kneeling function, which lowers the entry step to 438mm off the ground on a one-step version, or just 150mm on the two-step arrangement. (Having tried the single-step variant, however, its ease

of entry seemed more than adequate.) Used in conjunction with the automatic park-brake, the kneeling function automatically activates when the truck comes to halt, neutral is selected on Opticruise, the driver removes the seatbelt, or opens the door. Pulling away from rest, the cab rises 90mm to the normal driving position when the speed reaches more than 30kph (19mph).

Not surprisingly, the coach-like forward seating position and air-suspended front-axle delivers an extremely comfortable ride on L-series. (It was equally so on the P-series four-wheeler.) In both cases they exhibited Scania’s trademark soft-but-never-sloppy suspension. And the change quality of the current Allison six-speed auto, and its suitability to the 9-litre DC09 diesel in the L-series, continued to impress.

Summing up, this middleweight rigid range offers no less than 11 cab options (including crew cabs), a choice of 7- and 9-litre engines, six transmissions and a multiplicity of axle configurations and chassis options, plus alternative fuel choices. Operators should have little trouble finding a model to match their own specific urban delivery mission. **TE**