



TILT 'N' SLIDE



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Versatility and practicality are key priorities when considering a vehicle purchase. As **Paul Matthei** discovered during a recent test, Hino's 300 Series Crew Auto fitted with a Kyokuto Slide Tray body has these qualities in spades.

Long-term *Diesel* readers may recall my mention in an editorial some five years ago of a long-held ambition to restore my first car, a 1963 EJ Holden Special sedan, which I've owned since 1985.

Well folks, as you can see the ball is now well and truly rolling, with the car stripped down to the bare shell. The next step was finding the best way to transport the various components from my home in south-east Queensland to ReCoat Smash Repairs and Paint Stripping in Wodonga, northern Victoria, the outfit entrusted to carefully and skilfully remove every skerrick of paint and rust from the components, thus leaving me with a base of shiny steel to begin the build.

This is where Hino stepped in and

offered the use of a terrifically versatile 300 Series crew-cab unit fitted with a Kyokuto three-tonne slide-tray body. Now, there were a number of technical difficulties involved with removing said body shell from the garage behind my house, not least that it had to come out through an opening with just two metres' head clearance. Furthermore, with the shed's internal height of 2.5m, once the body was hoisted to the rafters there was barely half a metre of space between it and the floor. In other words, the nifty slide tray unit on the Hino easily accomplished what would have been an impossible feat for a conventional tilt tray.

With the rear of the truck positioned about two metres from the doorway, the tray deployed rearward and then

tilted down until the rollers at the rear contacted the floor. It then started to ramp downwards as it cleared the rear of the truck until the entire tray sat horizontal on the floor, thus easily sliding underneath the suspended body. From there it was simply a matter of carefully reversing the truck until the body was positioned over the centre, then lowering it onto the tray. After strapping it down, the process was reversed and the tray glided effortlessly forwards and upwards onto the truck, just like poetry in motion. As the clearance between the roof of the car and the roller door during the extraction process was only about 100mm, it was vital to be close to the action while the unit was in operation. This is where the handheld remote control unit proved invaluable

as it enabled fingertip control from any position around the truck.

Another point worth mentioning is the exceptional low-speed 'creepability' afforded by Hino's automatic transmission, which was a boon for negotiating the tight access around the side of my house. With literally a few centimetres of clearance between truck and eaves, it was necessary to manoeuvre at a snail's pace to ensure no contact was made between the truck and the house or retaining wall on the other side. With a manual version this operation would have involved a considerable amount of clutch slipping.

TARMAC TORQUE

With everything strapped down securely it was time to hit the road for the long journey south. With the relatively light payload, and Hino's claim of having the most powerful engine in the light-duty

league ringing in my ears, it was perhaps easy to assume this wasn't going to be a slow trip.

The engine boasts hearty power and torque figures of 205hp (151kW) and 600Nm (443 ft lb), respectively, with the latter produced uniformly between 1,500 and 2,000rpm. Peak power arrives at 2,600rpm, which is 100rpm shy of the red line. These figures feed into a six-speed Aisin torque converter automatic featuring double overdrive (0.77 fifth and 0.63 sixth) and lock up of the torque converter on all forward gears except first. The final drive ratio is 5.14:1, which allows a theoretical top speed of 120km/h, and 100km/h cruising at around 2,100rpm.

Due to my regular driving job I'm a frequent flyer on the Pacific Highway, so I chose to take the inland route for a change of scenery. This involved heading west through Lismore and Casino to

Glen Innes then south through Tamworth, Dubbo and Wyalong. Through the winding mountainous terrain east of Glen Innes, the little Hino gave a good account of itself, maintaining a respectable average speed up hill and down dale.

Particularly impressive was the compatibility between transmission and engine, which kept the revs in the peak torque range between 1,500 and 2,000rpm. Furthermore, it was pleasing to note no tendency of the transmission to 'hunt' or kick down too early when climbing hills, thus keeping the revs in the aforementioned sweet spot. In fact, during steep climbs with the accelerator pedal pressed hard into the floor, the transmission remained in the right gear to enable maximum torque to reach the drive wheels.

Shifts aren't as smooth as a car but this is largely because the torque converter locks up after each change to ensure full power reaches the road. This feature also helps maximise exhaust brake retardation, which proved surprisingly effective on the steep descent of the Moonbi Range, north of Tamworth. Locked into fourth gear, the Hino maintained the regulation 60km/h with only a few taps of the brake pedal. I think psychology comes into play here – due to its quiet operation the exhaust brake isn't perceived to be having as much effect when compared with that of a bellowing Jake brake on a prime mover.

The lock-up function also helps fuel economy and in this regard the Hino averaged 5.5km/litre over the course of the trip. It was interesting to note the difference in fuel consumption when cruising on the freeway at the 110km/h limit compared to knocking the cruise control setting back to 90km/h. The difference was an astounding one kilometre per litre and I put this down to the considerable extra wind drag created by the ramps. Indeed, this added drag acted a bit like a parachute on long downhill freeway sections, holding the speed steady at 100km/h where you would normally expect to gain speed.

As for driver comfort, the ride is characteristically firm with the four-way adjustable driver's suspension seat





and slip' hazards, as the body is horizontal and at floor level.

"The unit can be fitted to a crew or single-cab chassis and comes complete with certified tie-down anchor points, a winch and handheld remote. It's ideal for applications like contract landscaping for ease of loading ride-on mowers and the ability to carry six people – a complete crew of two mower operators and four line-trimmer operators all in one vehicle. It is covered by a 12-month manufacturer's warranty."

Testament to the Hino's abilities, I arrived at ReCoat Wodonga feeling none the worse for wear after two solid days of driving. Deploying the tray with its cargo ready for unloading certainly caught the eye of ReCoat's owner Tony Valta. Having been in the smash repair industry for over 30

years, Tony has seen his fair share of tilt trays, but it seemed none to date had impressed him as much as this Kyokuto unit.

"It's a bloody beauty," Tony said, as the unit swiftly and seamlessly went through the various hydraulic stages of tilting and sliding the platform rearwards. "That would save a lot of time and effort compared to a conventional tilt tray because you are not winching the vehicle up a ramp. It's so much easier to do that on the level."

Being a classic car enthusiast himself, Tony also mentioned the fact that winching a lowered car onto a conventional tilt tray can damage the front panels, an issue that is completely eliminated with the slide tray unit.

In summary, the Hino 921 Crew Auto with Kyokuto slide tray did a truly remarkable job during the two weeks I had it on test. The versatility of both truck and body is sure to endear it to a wide range of end users who need to carry a crew and frequently load and unload machinery during the course of the day. **ID**

isolating all but the worst bumps from the driver's bum. In typical Japanese light-truck style, the seat base is virtually flat which makes for easy entry and egress but doesn't do a lot for lateral posterior positioning on long trips. The seats are clad with heavy-duty canvas seat covers that look like they'd take many years of hard use without flinching. Adding to driver comfort is a steering column that adjusts for rake and reach, although those with long legs and short arms would perhaps appreciate a little more telescopic extension.

Hino's multi-function touchscreen 'infotainment' unit featuring sat-nav and radio proved easy to use and the digital radio maintained clear reception in the more isolated parts of the country.

In-cab noise intrusion at highway speeds could be a bit lower, in my opinion. Some extra underbody sound-deadening measures would do the trick here.

The rear seat area is fittingly utilitarian and features a separate aircon unit and a decent grab handle across the width of the cab. The squab is hinged

at the rear enabling it to be stowed vertically against the seat back, thus providing a cavernous storage space when required.

CLEVER KYOKUTO

The slide-deck tilt-tray body made by Japanese manufacturer Kyokuto is certainly a masterpiece of engineering and design.

The unit is imported and fitted to the Hino chassis by Import Machinery & Equipment Australia (IMAEA), based in Caloundra West, Queensland. According to the company's brochure, the Kyokuto JN02-45 Slide-Deck Tilt Tray is priced from \$44,750 + GST, fitted (truck not included). Body length and width is 5,700mm x 2,070mm.

"It works in the same way as a conventional tilt tray, but with the added advantage of being able to slide the deck level/flat on the ground," the company says. "This not only has the benefit of allowing loading of low-bodied cars without damage due to the 0.9° approach angle, and also minimises workplace health & safety (WHS) 'trip