



# HINO moving into FWD

It comes as a bit of a shock to realise Hino has not sold a light-duty 4x4 truck before now, and the new 817 4x4 is now on the road. POD went to see the new model unveiled and took the truck out to put it through its paces.

**W**hen you are a major player in the Australian truck market like Hino, the idea is to fill as many market segments and applications as possible. Therefore, many would be surprised to find the company has never built a light-duty 4x4 truck. The 500 Series has always featured four-wheel-drive models, but not the 300 Series.

Now, all that has changed. The Australian market is the first to release a new set of models, based on the 300 Series with 4x4 capability. The initiative to develop these models and much of the development work came from Hino Australia, but these trucks will become available elsewhere in the world, over time.

The development of this truck began

***DIESEL WASN'T GAME ENOUGH TO PUSH THE LIMITS TO SEE HOW THE STABILITY CONTROL PERFORMED BUT, NEEDLESS TO SAY, IT DOES ADD TO THE SENSE OF SECURITY THE DRIVER FEELS.***

back in 2009 with a survey of customer needs that identified the possibilities of such a truck. In 2012 Hino's global technical team came from Tokyo to see for themselves the conditions such a truck would have to handle. By 2014, Hino Australia began field-testing prototype models to fine-tune its design. The decision to go into production with a model came in 2016, and late 2017 saw the introduction of the Hino 817 4x4 models onto the Australian truck market.

The engine used in this new model is

the Hino N04C UT, which is rated at 165hp (121kW) of power at 2,500rpm, with a flat-topped torque curve at 464Nm (342 ft lb) from 1,400rpm up to 2,400rpm.

The basic transmission being used is a six-speed manual. This gives the truck a deeper first gear and a higher overdrive capability. Low-range first gear uses a 14.165:1 ratio, whereas at the other end of the scale, top gear uses 0.782:1 to get to 100km/h at 2,450rpm.

Both of these ratios are vital for the truck to be able to do its job properly.





**In Australia, 4x4 trucks are sold 30 per cent into mining type tasks, 30 per cent into the fire and rescue services, and local government makes up another seven per cent.**

The low ratio makes manoeuvring at slow speeds and maintaining traction possible, but the high ratio means the truck can cruise at 100km/h on long highway journeys into the kind of remote areas this truck is designed to cope with. The transfer case uses a 2.2:1 ratio and comes from the bigger 500 Series 4x4 models – clearly able to cope with the task.

All of the models are fitted with disc brakes. This is a first on a 4x4 from a Japanese manufacturer in Australia. All trucks are also fitted with vehicle stability control, which is useful in improving safety out on the highway for a vehicle with a high centre of gravity. ABS is fitted, but automatically turned off when four-wheel drive is engaged.

Through its extensive testing program, Hino had customers working in the dustiest of conditions for a drilling company based out of Kalgoorlie in Western Australia. The disc brakes stood up well in those conditions.

Another design feature to come from this testing in both Western Australia and North Queensland was the positioning of the air intake – one metre higher than the current

300 Series models. In fact, this air intake configuration will be feeding into the rest of the Hino light-duty range over the next couple of years.

The truck comes as a single cab or a crew cab, both built on the same wheelbase truck. There is a suspended driver's seat in all cabin options. Reversing camera is standard on all models. Suspension design, a vital issue for a 4x4 truck, sees the new 817 4x4 using multi-leaf steel springs.

In Australia, 4x4 trucks are sold 30 per cent into mining type tasks, 30 per cent into the fire and rescue services, and local government makes up another seven per cent. The rest of the market varies across tasks like forestry and others where a 4x4 capability will come in handy.

### **OUT ON THE ROAD**

Quite often, when it comes to developing a 4x4 version of a truck, the all-wheel drive lags behind the rest of the range, often using an older cab and not including all of the latest gadgetry. The 817 4x4 is different. These are the latest Hino 300 Series cabin and systems on a 4x4 chassis platform.

Of course, there are compromises to the

needs of all-terrain truck users, and fixtures and fittings do get a little pared down, just because of the conditions the truck will be working in. However, this Hino feels very similar in look and feel to the current 4x2 light-duty trucks in the range.

This engine is smooth and has the right amount of grunt in the right places. The power levels now being made available in trucks this size are much higher than in the past, leading to a situation where the engine never seems to be toiling hard, no matter what the driver is putting it through.

The gearbox has a solid and positive feel through the cable linkage, and once the driver gets accustomed to the gear layout it is a simple box to handle. Unfamiliar drivers could get caught out by the gearbox layout on the six-speed box. The detent position for the gear stick, if left to its own devices, is in the middle of the gearbox and not between second and third gear, as it often is on a six-speed box.

Engaging four-wheel drive is simple enough with two buttons on the dashboard to press when the freewheeling hubs have been locked.

The ride is always going to be stiffer





The ride is always going to be stiffer than we find in the 4x2 models but it does feel surprisingly smooth.

than we find in the 4x2 models but it does feel surprisingly smooth. Then, when out on the forest roads and in less than ideal conditions the truck's suspension comes into its own. The suspension gets the most out of the traction available.

*Diesel* wasn't game enough to push the limits to see how the stability control performed but, needless to say, it does add to the sense of security the driver feels. Noise levels are relatively low inside the cabin at highway speeds. There is bound to be a higher level of tyre whine, but this is due to the nature of 4x4 tyre design.

The dashboard layout is well thought out. On the left is the tachometer, and in the middle is the speedometer. A bar goes across the middle of the speedo and on this is the LCD screen, with things like fuel, temperature, odometer and also the DPF levels. Underneath are the indicators the driver needs to see all of the time – high or low range, cruise control on or off, four-wheel drive engaged, etc.

Cruise control is controlled not by a stalk on the steering column, but by one

fixed to the steering wheel. Therefore it travels around with the driver's hand and is close at hand, even when turning the wheel. It is also well designed and easy to use, not too complicated.

Substantial grab handles on all of the pillars, A, B, and C, aid entry into each of the doors on the day cab and crew cab. This ensures there are three points of contact available to anyone climbing in and out of any door. The size of the A pillar grab handle does, however, compromise access for the driver to the – normally well accessible – holder for the vital cup of coffee just below the driver's side air vent.

All in all, this new 4x4 is quite an achievement for the Hino organisation. The conservative Japanese truck manufacturers take a lot of convincing to head in a new direction. Hino Australia has managed its own development program to come up with a design that ticks all of the boxes in Tokyo, and will be added to the portfolio of models offered by the company around the world. **IID**

This new 4x4 is quite an achievement for the Hino organisation.

