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SCRAWNY'S SHIFT IN OPINION



No problem for the Hino negotiating Coromandel Peninsula's steep hills and tight turns

MAYBE IT'S JUST HUMAN NATURE TO BE SCEPTICAL about something we've never experienced for ourselves firsthand.

Anyway...whether or not that's the reason, Ross Butterworth says that prior to his boss, Graeme Christensen, handing him the keys to a brand-new Hino 700 Series, he wasn't keen on the idea of driving an automated manual transmission.

Butterworth, a gentle giant of a man known as Scrawny, had driven manuals all his trucking life – was always particularly fond of the 18-speed Roadranger manual gearboxes installed in many of his previous trucks.

But now, having got used to the Christensen Cartage FS 2848 Hino's ZF AS Tronic ProShift 16 AMT, he reckons he wouldn't want to go back to a manual.

Ironically, having said that, he prefers to drive the Hino in manual mode – reasoning that knowing every curve and incline on the steep and twisty Bay of Plenty roads he travels over every day, he knows which gear will be most suitable for each upcoming bend or hill so he can select the correct ratio ahead of time.

"I prefer running it in manual...I can control the gears that I want. Climbing around the hills like I do, you know, I know where I've got a steep piece of road coming up, so I can flick it down one beforehand, so it's in full go... ready for the climb.

"I suppose auto would be alright if you were out on the flat, but it's pretty steep around here, so manual mode works better for me. But it's so much easier than a conventional manual box.

"On these roads, I find that if you run it in auto, it'll shift up and down a bit too much. It's like a newly married couple... too much up and down and it wears you out," he reckons with a laugh.

And he adds: "Now that I've got used to it, I love this

transmission. It's brilliant."

Learning how to get the best out of the 16-speed AMT in manual mode did take two or three days – "to really get to know it properly...get the rev range right for when to shift.

"People who are against autos say that with a manual you can hold onto a gear – but you can with this too. And this is so much easier to bat it up one, or shift it down quickly, with no need to use a clutch.

"If you'd have told me 18 months ago to drive an auto, I would have told you to get lost. Now I'd say that anyone who drives a stick-shift needs to try one of these. If I went back now I'd probably get lost – I'm not used to using my left leg any more. This one's so much easier," he adds.

We discuss the merits of the transmission, along with other aspects of his new truck – oh, and fishing (his real passion) – as the 6x4 Hino, with its Transport and General (T&G) alloy tipper bin and a matching four-axle trailer are being treated to their weekly scrub at CleanCo's Mt Maunganui truckwash.

He takes a particular pride in keeping his rig clean and can't speak highly enough of the service the boys at the truckwash provide.

"This morning I got here and they weren't really open yet, but those two fellas said 'bring it in, we'll do it for you,' which I thought was great. I really appreciated that.

"Sometimes there'll be four or six of them working away, cleaning and scrubbing the truck. You can't fault them – they just get into it. Just excellent service."

Today is similar to any other for Scrawny. He left home in Whitianga – he's lived in "paradise," as he calls it, for 62 years – at 4am, delivering a load of metal to Allied Concrete's readymix plant in Tairua.

From there he's headed back to Paengaroa Sands in Te Puke for another load of washed sand – this also to be



Left: The happy-go-lucky Scrawny loves his new truck

Right: Whether in manual or auto, the short gear selector makes the ZF AS Tronic Proshift 16 very simple to operate



Washed sand from Paengaroa is tipped off at Allied Concrete's Whitianga plant

delivered back in Whitianga...and has stopped off for the truckwash en route.

The new 480-horsepower Hino replaces Scrawny's previous 450-horse version of the same make. The old 450, with its 18-speed Roadranger gearbox, remains with Christensens – one of six Hinos and an International on the fleet. But now that it's clocked up a big mileage, it's being put to lighter duties.

As the newly-washed Hino heads out of CleanCo into the busy early morning traffic, it powers away with ease as Scrawny selects sixth gear to merge with the traffic.

"I can easily take off in sixth when it's empty – fourth when it's loaded – and I shift two at a time. But even when it's loaded, it never struggles – it just takes off," he says.

Although the 12.9-litre intercooled turbo diesel has only 30 more horses than his old truck, it's the impressive torque that Scrawny loves about the new one.

The six-cylinder overhead cam engine produces 2157Nm of peak torque at 1100rpm. But the torque curve, more accurately described as a flat torque line, stretches across an impressively wide rev range.

From just above idle, right through to the 1900rpm red line, torque remains very close to 2000Nm, so the engine remains willing and flexible under all conditions.

As Scrawny says: "It just has so much more usable grunt. The most I need to pull out of it is about 1500 to 1550 revs, but generally it cruises quite nicely at 1400-1450 or so and just seems to love it in that range."

Its cooled EGR (exhaust gas recirculation) and SCR (selective catalytic reduction) systems reduce harmful exhaust gases – meeting the Euro 5 standard. It has a 28-litre diesel exhaust fluid/AdBlue tank to supply the SCR

system.

Scrawny says the clean-burning unit returns an average fuel consumption figure of between 2.2 and 2.4 kilometres per litre – a big improvement, he says, over his old unit.

Despite the relatively heavy traffic, the 30-odd kilometre run to Paengaroa Sands is no real challenge for the Hino, but it is useful in giving us an opportunity to familiarise ourselves with the layout and interior of the cab.

First, the steps and grabhandles seem perfectly spaced and placed, so getting in and out is no hardship at all, and all-round visibility is excellent.

As with all of Christensen's fleet, the Hino's fitted with a full-width mesh stoneguard, a sunvisor and monsoon shields – all supplied as a kit, manufactured locally by Visor Distributors. Scrawny reckons the stoneguard saves a hell of a lot of windscreens.

Once inside, initial impressions are that this is a conservative but nicely finished interior. There's soft fabric headlining and plenty of soft-to-the-touch materials throughout. There's nothing flashy or unnecessary, and it has a no-nonsense sort of air about it – but it also feels sturdy, well put together and well laid out.

Everything is within easy reach of the driver and on the move the truck seems perfectly fit for purpose and cruises quietly and comfortably out on the highway.

Scrawny agrees: "Comfort-wise, this truck is very good. The seats are very comfortable...I get the good one (the ISRI 6860 high-back, air-suspended driver's seat with lumbar support), but they're both pretty good.

"There's not a lot of storage in the cab, but I don't really need any more."

He gestures behind him to the bunk: "There's a bed

there – but she’s rock-hard and I wouldn’t like to sleep on it. But I’m never likely to, so overall it’s a great truck and I’m very happy with it. I’d rate it an easy nine out of 10. It’s great.”

The truck’s serviced, as per its warranty, at Truck Stops in Mt Maunganui. As it has on occasion been doubleshifted – doing over 800kms per day – servicing can be as regular as once a month. But other than routine maintenance, Scrawny says it’s been completely reliable and troublefree.

It’s quiet and free of squeaks and rattles. The Hino’s semi-elliptic tapered leafspring front suspension and Hendrickson HAS airbag setup with double-acting shocks on the rear provide a firm but comfortable ride, and bumps and undulations in the road are soaked up particularly well.

The T&G trailer rolls on ROR CS9 integrated air-suspension axles and it too, seems to be made to tight tolerances, free of a lot of the clang and clatter that some tipper trailers exhibit.

High-tensile steels ensure that the cab structure is strong and safe, meeting ECE R29 structural standards. Other safety features include front underrun protection, a driver’s airbag and ABS braking.

Says Scrawny: “My only gripe (which isn’t really about the truck at all), is I wish I could buy a good sheepskin seat cover!

“I’ve yet to find someone who can make one to suit this. I wouldn’t mind paying the money. I like sheepskins, so I use this old one that I take home and my wife

washes. “I like to be as comfortable as I can. If you’re sitting in an office all day, you want to be as comfortable as you can, and it’s the same for me in my truck.”

As soon we reach Paengaroa Sands and join the short queue of trucks waiting to be loaded, Scrawny gets out a cleaning cloth and proceeds to start dusting and polishing the interior of the cab: “I hate getting into a dirty truck. I don’t live in a pigsty at home, so why would I want to drive in one when I’m at work?”

You get the distinct impression that Scrawny is a pretty meticulous sort of guy who’s easy on the gear, takes good care of everything and keeps it all in tip-top condition. He clearly treats the gear – and people – with respect.

Suffice to say that he has been around trucking for a while. Or in his own words he’s “gone a few rounds.”

He started driving trucks at the age of 18 and has done quite a bit in the intervening years.

“I started out driving for a joker called Alf Simpson, driving a petrol engine S Series Bedford. I progressed onto a D800 Ford, but I left when I was 21 and went to Oz. I worked in the mines at a place called Paraburdoo, in Western Australia. I drove diggers, dumpers and bulldozers – the lot.”

It’s not only trucks and heavy equipment that Scrawny’s CV boasts though. Like many in trucking, he’s driven everything from racing cars to big boats.

“From Paraburdoo I went out to the coast to a place called Cape Lambert, working on a tugboat. I was only a deckhand initially, but then the skipper fell off the wharf

“I hate getting into a dirty truck. I don’t live in a pigsty at home, so why would I want to drive in one when I’m at work”

drunk as a skunk and injured himself badly; the rise and fall of the tide out there is like, eight metres.

“So they said to me ‘you know how to drive it,’ so I ended up skipping it for a while.”

This was his first foray away from working on dry land, but his passion for boats – and fishing in particular – saw him put in a long stint at sea: “I did 23 years commercial fishing – scallops, crayfish and that – out of Whitianga.

“I like my fishing. I’ve had 14 boats over the years, but I don’t have one now. Maybe if I won Lotto....”

“My missus gets the Lotto tickets...she never does as she’s told,” he reckons wryly: “I keep telling her to buy the winning ticket, but she never gets the right one! Maybe it’s just as well, ‘cos if I had a boat, I’d be out fishing all the time.”

Just as he spoke highly of the truckwash guys, Scrawny’s also quick to sing the praises of Kelly, the loader driver here at Paengaroa Sands.

He is, he reckons, “just a brilliant machine operator. He really knows how to load a truck evenly and you never

hear a complaint about him. He’s really switched-on and the weights are always absolutely bang-on.”

With that, he produces yesterday’s loading sheet: “Look how even these axle loadings are.”

A quick glance at the sheet reveals that the seven axles are within cooee of six tonnes apiece: “As you can see, they’re pretty even all the way through,” he says.

“Just before Christmas, the CVIU (Commercial Vehicle Investigation Unit) were having a bit of a blitz.

“On the Tuesday I was stopped here at Paengaroa. On Wednesday, they pulled me over at Maramarua and on Thursday I was checked at Netherton – going to get a load of fert.

“Finally, on the Friday I was stopped at Waihi. I just handed out all the papers from the previous days, and the joker took a look at them and said ‘Geez, it’s no good pulling you up... see you.’

“No way were they gonna get a Christmas present out of me. Touch wood, I’ve never even had a speeding ticket in my life,

The Hino and its four-axle Transport & General trailer handle well on the wet roads

Right & below left: Torque of the 12.9-litre E13C VG engine remains strong throughout the entire rev range

Below right: The ISRI 6860 seat is comfortable and supportive. The finishing touch for Scrawny would be a new sheepskin seat cover!



Well-laid-out driving position has all controls close to hand and includes simple and clear dash instrumentation



As with our empty drive to Paengaroa, although we're now hauling a full load of sand, the Hino seemingly doesn't notice the difference on this relatively flat part of the run

so I don't want to get done for being over-weight either. When you look at those loadings, they're all even and well within limits. Kelly's just great."

As good and well-built as the truck is, Scrawny reckons a lot of the comfort level comes from this even loading.

But although he recognises the courtesies shown and strengths demonstrated by some of the younger truckies he deals with on a regular basis, he's concerned that the industry that's been so good to him through the years is failing to attract enough new blood.

"One of the biggest problems in the whole industry is there are very few young fellas coming through. It's hard to get a licence and there's a big cost to it these days," he says.

"But some of the companies are to blame too. They aren't paying decent money, so they can't get good drivers – or they pay low rates and get some cowboy who's gonna destroy the truck, so it'll be off the road for repairs.

"When you stop and think, they'll spend a few hundred thousand on a truck, but it's no good to anyone unless the wheels are turning. But Graeme's been good to me.

He asked me to help him out for a week. That's about four years ago and I'm still here!

"Graeme started the business about 12 years ago. I've known him since he was a kid...his father and I were great mates...used to knock around together.

"He's not only got the trucks – he's got an agricultural business as well and does silage, seed-sowing and all that, so he's a busy boy. His wife, Vanessa makes sure the RUC is all up to date and that."

Next it's our turn to be loaded and, true to form, Kelly spreads our 29.5t payload evenly through the two bins.

So, with our fully-laden truck and trailer tipping the scales at 43.66t, we leave Paengaroa, bound for Whitianga.

Scrawny opts for driving through Tauranga: "I've tried all other ways, but I still find this is the quickest and easiest." He says that the four-axle trailer tows and tracks well and is no problem in traffic so... "it's just easier for me to go through town."

As with our empty drive to Paengaroa, although we're now hauling a full load of sand, the Hino seemingly doesn't notice the difference on this relatively flat part of the run.

But the further north we travel, the more challenging the terrain becomes. But still the Hino handles it with relative ease.

The 700 Series is electronically governed to 100km/h, a speed at which (according to the factory spec sheet) the engine would be revving at 1693rpm. However, Scrawny tells us (and as sure as the sun rises in the east, we're confident he's a man of his word), he's never been over 90.

At 90km/h on the open road, she's revving at around 1550 in top. It's still quiet and the engine doesn't feel like it's working hard at all. Shifting down a couple of cogs when we get to the hills, Scrawny works the gear-select lever with ease and his earlier explanation of how he can hold the gears and anticipate what's coming up starts to become evident.

As good as AMT transmissions are these days, perhaps Scrawny's newly-married couple analogy is a fair summary of how they function in automated mode when traversing twisty hill country.

But when selected manually, the shifts are smooth, the engine's always in the right rev range and there are no

unnecessary shifts up or down. The driver is in control.

However, it has to be said, to achieve this perfect state takes experience. And a driver who has a feel for the gear...who understands when to shift and when not to, and when it's appropriate to hold a gear.

So, on that basis, a driver who cut his teeth on a manual box is probably more likely to adapt to operating an AMT the way Scrawny does.

The hill descents are every bit as important as the hillclimbing. Manually holding gears and aided by the truly impressive three-stage ZF Intarder and exhaust brake, Scrawny rarely needs to use the foot brake.

The system not only provides excellent driver assistance, but saves considerably on brake-lining wear and alerts following drivers that the vehicle is slowing by applying the brake lights.

Some of the tight turns have 25km/h and 35km/h advisory signs, and the Intarder has no trouble in keeping us within the safe signposted limit.

During our late-summer run, we encounter several areas of roadworks: "Why did we bother washing it?" grumbles Scrawny as we negotiate one particularly long



Scrawny finds the Hino easily manoeuvrable – coping well with the traffic on a wet day in Te Puke



With some particularly steep downhill slopes that have tight, 25k corners at the bottom, he finds that the automatic's adaptive electronics ensure that the transmission holds onto the low gears....

and dusty stage.

However, it also reminds him of his one slight reservation about his new truck: "These Continentals (tyres) are really designed for tarseal," he reckons.

"And they're perfectly fine on the seal, but not so great on gravel, where it's a bit slippery. If I was running on metal like this all the time, I'd prefer something with a bit more meat on them...a bit more grip, you know." The tyres he's referring to are 275/70Rs, mounted on 22.5-inch rims.

Our smooth ride in this well insulated and capable truck continues for the remainder of Scrawny's run to Waihi, where **NZ Truck & Driver** publisher and test driver Trevor Woolston takes the wheel.

Scrawny has demonstrated how well the Hino's E13C VG powerplant can haul a nigh on 44t rig up hill and down dale with the AMT lever in manual mode, but for comparison Woolston's keen to find out how well the AMT will cope in automatic mode.

Like Scrawny, he cut his teeth on manual boxes and when he's driving a truck, he likes nothing more than shifting cogs himself. But the ProShift 16 is designed to operate automatically, so despite Scrawny's preference for running in manual mode, it should be capable of shifting by itself, whatever the terrain, so that's the mode

Woolston now selects.

While Scrawny has had some steep and twisty stuff to contend with, now we're into the most testing part of today's journey up the Coromandel Peninsula. And it's about now when the rain begins to fall.

Like Scrawny, Woolston feels that the tyres could do with a bit more grip in these slippery conditions. But on the positive side, the Intarder performs the braking function just as admirably in automatic mode as it did for Scrawny in manual.

With some particularly steep downhill slopes that have tight, 25k corners at the bottom, he finds that the automatic's adaptive electronics ensure that the transmission holds onto the low gears, maintaining a controllable low speed, setting the well-loaded rig up for the slow bends.

He's impressed by how well the trailer tracks and finds these challenging roads a really good test for the truck: "You know when it says 25ks, it's gonna be a tight one – but this just goes around no trouble. It's a good test for it."

And after just a few kilometres in the Hino, our test driver's clearly at home behind the wheel, enjoying every aspect of this ship-shape rig and says: "This is a bloody



Top: Windy, hilly Coromandel roads are part of the Hino's daily grind

Above, left: Scrawny tilts the cab

Above, right: The 400-litre fuel tank gives close to a 1000km range

good box. It shifts beautifully and that motor pulls really well.

"It's got a nicely appointed cab, airconditioning and all that, and I like the ISRI seat – it's pretty much the pick of the seats."

But more importantly, what does Scrawny's boss reckon? His fleet is dominated by Hinos, so what's so good about them?

Graeme Christensen explains: "What I like about them is that they're comfortable, reliable and you just can't kill them! I haven't done a lot of mileage in this new one myself, but I have done the Paengaroa to Whitianga run, as well as a run up to Opito Bay (where the terrain is particularly challenging).

"I've tried it in manual and auto, and it works well in either. I prefer auto for the flat and manual for the hills, but that's just my personal preference."

Likewise, Gary Cargill (Gazza), another of Christensen's drivers who's spent some time in the 700 Series' seat, raves about it: "I like that truck a lot...actually it's a pretty amazing truck and handles the hills real well.

"When I drove it, some days I'd drive it in auto all day. Others, I'd change it myself. The guys from Hino told us that the gearbox adapts to your driving style, so after a while, it knows what to do.

"But the whole setup is great. Driving comfort is right up there – with those airbags under it. It's a well-set-up unit. You know, some guys put a new truck on the road with a 20-year-old trailer behind it. That's no good. Technology moves on, and you don't get the full benefit. No, I really like that truck."

So...auto or manual, this 700 Series Hino with its ProShift AMT is more than up to the task – whichever way the driver chooses to use it. **T&D**



IT'S A JOB THAT'S A BIT LIKE TAKING

coals to Newcastle – carting a load of sand from Paengaroa, in the Bay of Plenty, through to driver Scrawny Butterworth's Whitianga hometown – on a stretch of the Coromandel Peninsula renowned for its sandy beaches!

But never mind that – it does create a great opportunity to really put Scrawny's new Hino FS 2848 700 Series and its ProShift 16 automated manual transmission to the test, with all of the hills and tight, windy road we'll traverse.

I take over the driving at the goldmining town of Waihi and pilot the Hino through

to the historic town of Coroglen, famous for its historic kauri logging operation which used the Coroglen River to wash logs down to the coast.

It's a route that takes us up the east coast of the Coromandel Peninsula, via Whangamata and Tairua. It's got plenty of tight, winding and hilly stretches that will nicely test the power and the braking of the Hino, the capabilities of its AMT and the handling of the 6x4 tipper and its four-axle Transport and General alloy tipper trailer (which matches the T&G tipper body on the truck).

We head out of Waihi and the first

stretch is easygoing, but that quickly changes as we hit the first major hill: It's a beauty, with plenty of steep, tight corners – some speed-recommended at 25km/h – and long downhills.

It's a road that requires great respect, as you're sharing it with tourists in campervans and holidaymakers with their boats in tow.

I leave the ProShift (a ZF AS Tronic) in auto as the aim is to see how the automated manual handles this testing environment.

It's a great start, with the ProShift dropping down through the gears cleanly and never looking like it's going to have an issue. It'd be fair to say you couldn't do it

better yourself with a manual box.

It keeps the engine nicely in the green band the whole time, using the Hino's 480-horsepower E13C VG EGR and SCR engine in its ideal power and economy bands.

Once we crest the hill it's on with the retarder – a five-stage setup combining an engine brake and the ZF Intarder.

We make the descent, slowing to 25k for some of the tighter corners, without using the service brakes at all. It's very impressive.

Once over the hill it's a cruise past Whiritoa beach and a run into Whangamata that's a lot less hilly, but still with some good corners. The retarder gives you ample control going into the tighter ones, while allowing you to maintain a good road speed. And, once again, it's impossible to fault the ProShift.

Through Whangamata we hit the next lot of hills on the run through to the Kopu-Hikuai road and on into Tairua.

It's another good hill through Wharekawa and once again I leave the ProShift in auto. Power up hills like this is great – but I compromise the test to some degree, by pulling over regularly to let following traffic go by: No point in holding them up and making people impatient.

The Hino is certainly performing well. Its 480hp is nowhere near the most powerful on the market, but it is more than capable at 44-tonnes.

We roll on through Tairua and tackle the last physical obstacle – Pumpkin Hill. No problems up or down – and still no need to use the footbrake as I let the retarder do its thing.

The driving position is great, with excellent visibility and plenty of adjustment and comfort in the ISRI 6860 seat, with its integrated seatbelt.

All the controls fall easily to hand and the mirrors are a great combination of flat and spotters with heaters for those winter days (not that we need them). All we have to deal with is a bit of rain along the way – dealt with easily by the triple-arm wipers

All too soon we arrive at Coroglen, where I give Scrawny his truck back for the drive into Whitianga and the delivery to Allied Concrete's batching plant.

In all it's been a great test for the Hino and its Transport & General trailer, with the unit positioning well on the road through the many tight bends.

It certainly more than meets the challenges that the Coromandel Peninsula roads throw at it. **T.D.**

Scrawny reckons Paengaroa Sands loader driver Kelly is the best in the business



SPECIFICATIONS
HINO 700 SERIES FS 2848
PROSHIFT 16 AIR 6x4

Engine: Hino E13C VG

Capacity: 12.91 litres

Maximum Power: 353kW (480hp) @ 1800rpm

Maximum torque: 2157Nm (1590 lb ft) @ 1100rpm

Engine revs: 1693rpm in 16th @ 100km/h

Fuel capacity: 400 litres

Transmission: 16 speed ZF AS TRONIC ProShift 16 automated manual

Ratios:

1st – 14.12

2nd – 11.677

3rd – 9.539

4th – 7.889

5th – 6.521

6th – 5.393

7th – 4.565

8th – 3.776

9th – 3.093

10th – 2.558

11th – 2.089

12th – 1.728

13th – 1.428

14th – 1.181

15th – 1.000

16th – 0.827

Front axle: MF781 Reversed Elliot section I-beam, rated at 7500kg

Rear axles: THD18 tandem axle, dual drive with inter axle diff lock, rated at 21,800kg

Auxiliary brake: Engine compression brake and ZF Intarder

Front suspension: Semi-elliptic taperleaf springs with shock absorbers and stabiliser

Rear suspension: Hendrickson HAS air suspension with double-acting shock absorbers

GVW: 28,300kg

GCM: 72,000kg