

Smallest customer thinks big



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There are many suspension specialists in Australia, but there are few that could claim to specialise to the extent that 80% of their business is derived from one product sourced from one manufacturer, but that's the case with McArdle Repairs and Spares Pty. Ltd. of Riverstone, an outer northwestern Sydney suburb.

THE story really begins in 1962 when Gerry McArdle, originally from the village of Louth near Dundalk in County Louth Ireland, began his motor mechanic's apprenticeship with CIE, the publicly owned Irish National Transport Company, beginning what is to date a 35 year involvement repairing heavy vehicles.

In 1970, having made up his mind that "Working for CIE was an old man's job," and encouraged by workmates to see something of the world while still young, Gerry and his wife Rose came to Australia.

"It was either Canada or Australia," Gerry recalled. "But the weather reports and the fact that Australia was offering to pay our fares for 10 pounds decided the matter. We were only going to stay a couple of years, but somehow never got around to leaving.

"My first job was with an earthmoving company, C. H. Leslie, who were based in Artarmon and who did the excavating for the Sydney Opera House. When I went for the interview, the boss asked me if I knew anything about Commer trucks, I had to say no, having never had anything to do with them, but I pointed to a Leyland and said that I knew



Gerry McArdle surveys part of his stock of genuine Hendrickson spare parts. He claims to have every part for every Hendrickson suspension sold in Australia.

something about them. He said he was impressed with my honest answer and so I started at \$60 a week, double what I had been earning in Ireland and gaining experience on Commer and International trucks as well as Caterpillar tractors."

When the company ceased operations in 1975, Gerry bought the truck it had used for 'on site' maintenance and went out on his own, having built up a 'network of contacts', as he put it, while working for Leslies.

"It was a hard slog at first trying to build up the mobile repair business, just me, a set of tools and a sheet of cardboard to lie on," he said. "I'd been doing a bit of evening and weekend work for other operators while still with Leslies, and this kept us going, but these

people naturally still wanted the job done when the truck wasn't working, and it took a long time to build it into a full-time business with more or less normal hours."

For the first 10 years Gerry carried out general repairs, and still does to some extent, but gradually he began to concentrate on repairs to Hendrickson suspensions.

"It was the economics of it that got me interested," he explained. "Everything else had to be done at an hourly rate, but you could quote a price on rebushing a Hendrickson, and if you did it efficiently, you made more money, it's as simple as that. I was introduced to

Hendrickson suspensions while working for Leslies and so I knew the basics of how to service them."

In fact it would have been hard for any mechanic working on trucks in the 1970s not to have encountered the walking beam type Hendrickson rear suspension arrangement, as it was far and away the most popular tandem suspension in Australia at the time.

McArdle's business flourished and the mobile workshop eventually became an S series International, and Gerry was servicing trucks with Hendrickson suspensions as far away as Canberra, Dubbo and the Hunter, "Anywhere within a day's drive," he said. "The customers were owner operators, fleets and government

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Gerry with his most commonly used diagnostic tools. He is holding a reel of light cord with a large bolt tied to one end, a device he assures us that can be used to identify common alignment problems quickly and efficiently. What the string can't tell you, he says, a tape measure (on the bench) will. The workshop is also equipped with a laser alignment machine which is used to convince anyone who may think that Gerry is stringing them a line of blarney with his 'back to basics' approach to diagnosis.

departments. The workshop was often a paddock or the side of the road."

In 1989 and while living in Kurrajong, Gerry and Rose decided that it was time to do things differently and bought an industrial block in Riverstone and built a workshop on the site.

"Because our customer base is spread over such a wide area, no one location was ever going to be ideal, but this one had the advantages of having an 02 phone number, was relatively close to home and, most

importantly," Gerry grinned, "was reasonably cheap!"

Although the McArdles have what is in effect is a one mechanic business, it is very much a family business, with Rose continuing to handle the all

important telephone inquiries and scheduling the work while their daughter and son, both accountants, look after the accounts and stock control respectively.

By quoting competitively on repairing Hendrickson suspensions, the business attracted increasing numbers of truck owners who had heard about it by word of mouth. When these in turn became satisfied customers, they spread the word even further.

In fact the McArdles have never advertised, a business strategy that appalls the Brake & Suspension advertising team, but they do have a couple of things going for them. One is a long list of satisfied customers and the other is a complete stock of every part for every model Hendrickson suspension ever sold in Australia.

The extensive stocks of Hendrickson spares are possible because the McArdles deal directly with the manufacturer. This is largely a legacy of the past and Gerry's passion for quality work. McArdle was originally a customer of R.T. Tandem, which was the Hendrickson distributor in NSW and when R.T. was bought out by the



Typical of the trucks serviced at the McArdle workshop is this twin steer International tipper. Outside is a 26 year old Volvo which will be the next job.

local arm of the American manufacturer, McArdle remained on the books.

"Hendricksons are one of the largest truck suspension manufacturers and they tell me I'm their only one mechanic customer world-wide," explained Gerry. "There is no way we would qualify for a direct account these days, but they tell me I'm also one of their promptest payers, so they are happy to continue the relationship."

He says that Hendrickson provides good back-up and technical service. "If you've a problem, you can always get on to someone who knows what you are talking about and, more importantly, what they are talking about. By the same token they know they can get me to sort out the nuts and bolts of a unit that's giving problems that a truck dealer can't solve. It works both ways."

Gerry says that because he can buy direct, he can sell genuine Hendrickson spares at a reasonable price, and that is a major factor in the success of the business. Like almost all manufacturers of widely used O.E. components, Hendrickson has to compete in the spare parts aftermarket with non-genuine suppliers. Gerry says these vary considerably in quality, and while some of the better non-genuine parts are of reasonable quality, because he can purchase direct, the cost difference is not significant, and the cheaper ones either don't fit correctly or don't give adequate service. Sticking to 'the real thing' allows him to offer a 12 month unlimited

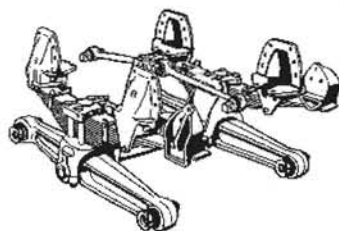


Gerry and Rose McArdle pose against part of Gerry's well organised hand tool selection. The 1 1/2" spanner Rose is holding is really just for show, although like most people in small businesses she has to be versatile, her talent for booking in and scheduling work is her major contribution to the business.

HENDRICKSON Suspension

FEATURES:

4 POINT FRAME MOUNTING
TWIN CLAMP SPRING HANGER
RANGE OF SPRING OPTIONS
HEAVY DUTY BEAM END CONNECTION
FORCED STEEL BEAM

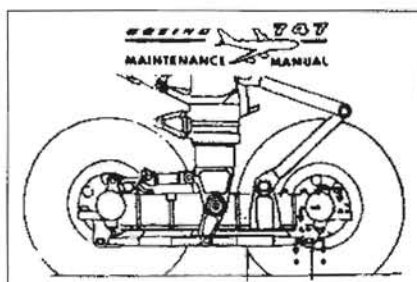


BENEFITS:

MINIMUM WEIGHT (5500kg)
LOW MAINTENANCE
FULL ARTICULATION
WIDE INDUSTRY ACCEPTANCE
APPLICATIONS - GENERAL PURPOSE On/Off Highway

RT-380 SERIES Heavy Duty Steel Leaf

The current Hendrickson RT-380 suspension features are outlined above.



For those who may consider the Walking Beam Principle has had its day, consider the landing gear of the B 747 aircraft. It uses beams for load sharing and articulation when it puts down 286 tonnes through 18 tyres at 320km/hr.

kilometer warranty on Hendrickson repairs.

We asked him to list the most common problems with truck suspensions and as expected, he cited broken springs, cracked saddles, worn bushes and unserviceable hangers.

"These things are inevitable when you look at the sort of work trucks do and the conditions they operate under. What worries me though, are the increasing number of failures and premature wear I see which is the result of someone treating the symptoms of a problem instead of its cause, or changing something without thinking through the consequences," he said. "And I think it's because many vehicles are now being serviced by people who are not motor mechanics, and who don't have the thorough training that would enable them to think through how what they are doing affects the rest of the vehicle. I often get a truck in with a broken front spring and find wedges incorrectly inserted under the front springs. Nothing wrong with that if it's done properly to

correct the castor angle, but when you find a wedge on one side with the thick end forward and on the other side with the thick end towards the rear, you have located the cause of your broken spring. The wedges have

obviously been put in to try to correct some alignment problem, and possibly it managed to achieve a satisfactory readout on the alignment machine, but what this sort of solution does is put increased stresses on the springs and inevitably leads to a broken spring, usually just above the thick edge of a wedge.

"Another common problem is someone changing the rear suspension geometry to correct an alignment problem but in doing so also changing the angle of the pinion to the driveshaft so

that the universal joint runs at too great an angle and fails prematurely. In both of these cases the real cause of the problem is somewhere else, but because the situation hasn't been properly diagnosed, possibly because whoever did it wasn't aware there is a limit to the angle U-joints can happily run at, and don't realise that there isn't a spring made that exerts enough torsion to twist a front axle.

"It's important to do the repair that is needed, not just try to eliminate the symptoms."

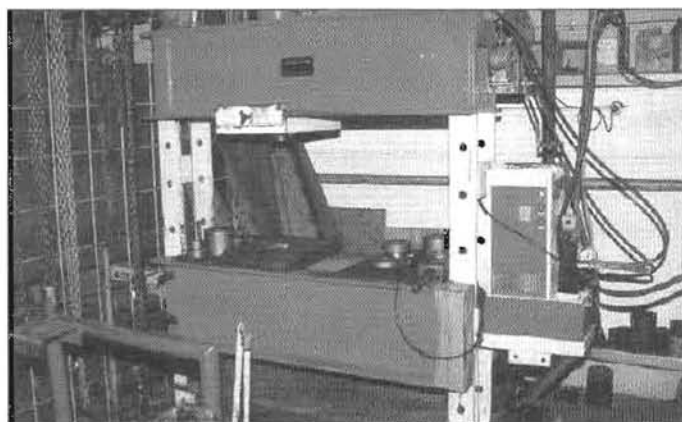
But getting back to the Hendrickson saga, there have been 30 to 40 different types of hangers for Hendrickson suspensions sold in Australia, with around 42 different torque rod

bushes, and, as Gerry says, "They all look the same."

This poses a problem with both identification and stockholding, the first of which Hendrickson overcomes with comprehensive catalogues and listings on CD-ROM, being one of the first companies to do so, and Gerry covers the latter by carrying stocks of every part for every model ever sold in the country.

This extensive stockholding means that McArdle Repairs and Spares sells a fair number of spare parts, and Gerry concedes that he has considered expanding this aspect of the business, but says he is reluctant to do so because of the potential problems of an enlarged debtor base, but he is happy to help out anyone who is stuck for a particular part.

But the main reason Gerry has succeeded in building a business around repairing



Big trucks need big gear. This 100 tonne press provides the oomph required.

Hendrickson suspensions is that he wasn't aware of how to go about it properly, and is quite happy to tell the world about his ignorance. This sort of situation of course immediately invites comparison with the butt of a stereotypical Irish joke. Although it's not politically correct to relate ethnic jokes these days, it was formerly common to overhear someone saying 'Did you hear the one about the Irishman who-' and continue on to relate the misadventures of some intellectually challenged individual named Paddy or Mick who obviously didn't have a clue.

While it is immediately evident to anyone
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that Gerry McArdle is Irish the moment he speaks, a few minutes conversation is enough to reassure you that he is in full possession of his faculties, but it so happened that when Gerry first set out to repair Hendrickson suspensions, he hadn't read the manual which says that it takes 2 mechanics 7 hours to re-bush one.

Not knowing that it was impossible to do the job by himself, he got stuck into it. He even neglected to take the wheels off, a necessary step in the procedure, according to the manual. Today, admittedly after a few year's practice, he completes the job by himself in 2 hours. The book still says 2 mechanics, 14 hours total.

Gerry has obviously given a lot of thought to streamlining the procedure and this has been complemented with an impressive array of tools and equipment to optimise efficiency, and it's also reflected in his times for rebuilding Hendrickson springs, 1.5 hours, and rebushing torque rods, 1 hour per set.

The ramifications of having worked out how to cut labour times substantially while still doing a first class repair goes a long way to explaining Gerry McArdle's enthusiasm for the economics of sticking with Hendrickson suspensions. It obviously allows him to win jobs while others are quoting by the book.

"There's no secret to doing it," he said. "It's just a matter of looking at a problem and working out the most efficient way of solving it."

He reports that when he started rebushing Hendrickson suspensions in 1975, the average cost of a set of beam bushes supplied and fitted



Rose McArdle booking in another job. Word of mouth from satisfied customers initiates most of the phone inquiries the company receives.

to a Kenworth was \$380.00. Today it is \$1075.00, not a great increase considering the relative cost differences of most other things over the intervening 23 years.

While all Hendrickson suspension systems look much the same, and a properly assembled RT400 system will run for 500,000 kilometres on highway work, it isn't designed for the continual tight turns encountered by say a garbage truck, where an RT440 system will be needed to give satisfactory service. So knowing what to recommend for specific applications is also very much part of the job.

Being in the truck suspension business, he obviously gets a lot of trucks with suspension, steering and alignment problems. He says the first thing to do is find the problem. Even if the owner is adamant that the problem is worn bushes or whatever, Gerry insists on checking the vehicle thoroughly before he starts the job.

"Often the problem is something different, or

there is something else contributing to it as well," he advised. "If you just do the job you were asked to do, and the problem isn't fixed, the result is an unhappy customer and often an argument. It's better to have the argument first!"

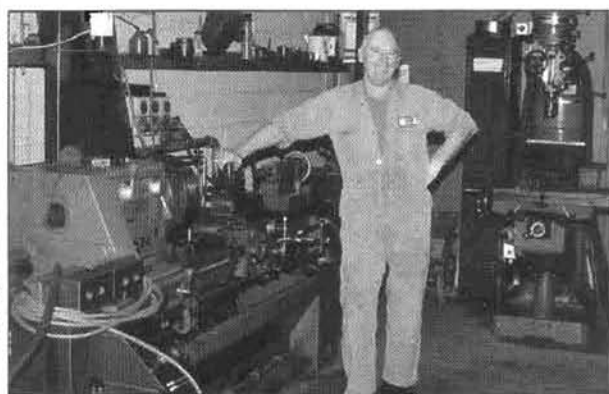
Sorting out the problem is the first step. The truck is driven in a straight line into the workshop, to ensure that the chassis isn't twisted slightly from being stopped part way through a turn. Gerry then collects what he calls his two most important diagnostic tools, a tape measure and a piece of string. The piece of string has a large bolt tied to one end and the bolt is looped over a brake booster or similar

object behind the back axle to anchor it, hooked into a convenient groove at the back of the outside rear tyre about level with the centre of the axle and Gerry then walks to the front of the truck paying out string as he goes, keeping it taut. He then brings the string towards the centre of the truck until it just touches the front part of the rear tyre, then observes how it lines up with the tyres on the front axle of the tandem, and the front tyre, or tyres if a twin steer. The procedure is repeated on the other side.

"The angle and the distance of the string to the various components gives you a pretty accurate indication of what's in line and what isn't," he explained. "Anything it can't tell you, you can discover with a tape measure."

The workshop is, however, equipped with a laser alignment machine for those that need to be convinced by modern technology and any situations where pin-point accuracy is needed.

Gerry McArdle has his doubts about whether trying to align most trucks to minutes of a degree is worth the effort. "After all," he said, "Trucks aren't precision instruments, which is obvious when you consider the potential for flex in the bushes and the inevitable play in the various components, and anyway it's not as if



The fully equipped workshop includes a lathe, a milling machine and surprisingly, an exhaust tube bender. Although hardly a necessity in a truck suspension workshop, the bender 'comes in handy', Gerry says.

you are aiming at the moon where if you are a fraction of a minute of a degree out you miss it by thousands of miles. You can line it up perfectly in the workshop but 100 metres down the road with a different surface and a different load the rubber bushes are under different stresses, the slack is taken up differently when accelerating or braking, the chassis is always flexing and so the alignment is constantly changing within ever increasing limits as the parts wear.

"Having said that, if you don't get your alignment reasonably right, you will get excessive tyre wear and steering problems. One of the commonest causes of truck wheel alignment problems is someone fitting a slightly different length spring on one side to that on the other. It's easily diagnosed, you only need to be able to read a tape measure, but some people will then fit an eccentric bush to 'correct' it and possibly stuff something else up."

Having had his say regarding how not to repair trucks, we asked him what trends were



McArdle's previous workshop was an International S model truck, servicing Hendrickson suspensions anywhere within a day's drive of Sydney. Gerry admits to being a Ford enthusiast, the 1949 Ford on the right being one of several, including a GT, that he owns.

affecting his industry.

"There are two major ones," Gerry said. "The first is the trend towards air suspension in a lot of vehicles except for the likes of agitator trucks where steel springs are still preferred. This will mean a gradual loss of spring repairs and because the air bags last very well, we won't be replacing too many of those. But fortunately air suspended vehicles rely on shock absorbers and torque rods to maintain stability and drivability, and because these really take a

pounding on an air suspended truck, we will be replacing a lot more shock absorbers and rebushing a lot more torque rods.

"The other thing is the increasing use by fleet owners of lease arrangements where the truck is maintained by the dealer under a service contract, so that

independents don't get a chance to quote on repairs until the truck is five years old and has been sold at the end of the lease.

"The saving grace is that most trucks last a long time, I've just done up a 26 year old Atkinson and there's a 20 year old Volvo outside that's just had a new body fitted and a paint job and the owner expects it to go for another 10 at least. There will still be springs to replace and walking beams to rebush when I'm ready to retire." ■