



ACREAGE

AGCO news across the land

New Zealand Summer 2005



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Vario Tractor Test
Future of Farming

MF Dyna 6 -
Introducing the next
generation transmission

Everyone's getting
into Baler Training

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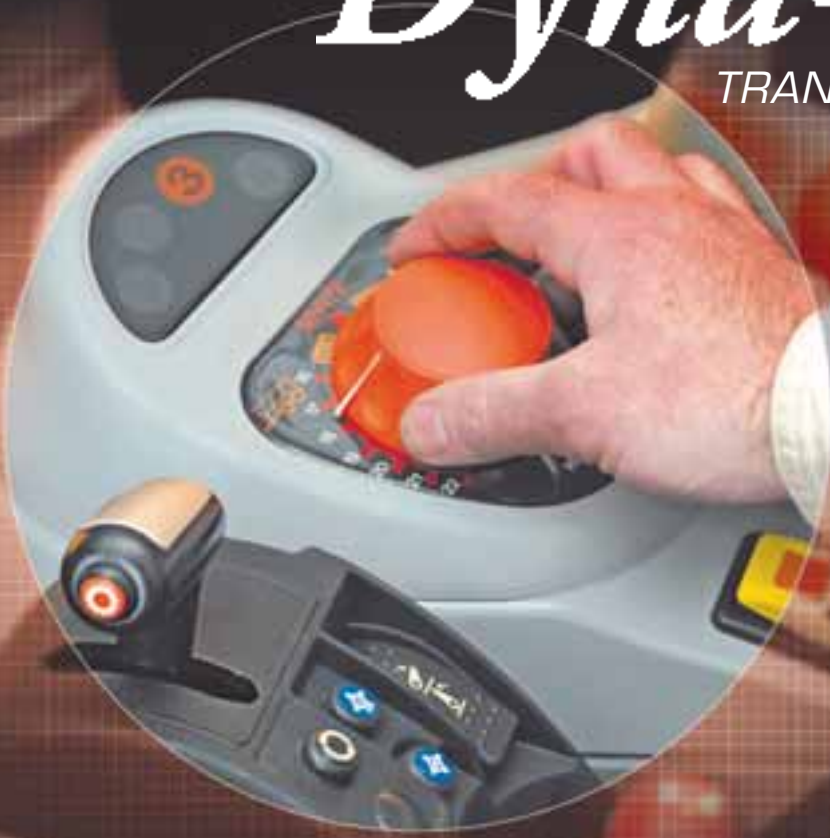
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INCORPORATING NEW

MF6400

Dyna-6

TRANSMISSION



90 - 145hp



Farming at your fingertips

The revolutionary Dyna-6 transmission, available on the MF6400 Series, couldn't be simpler. Offering six powershift speeds in each of four ranges, without the need for clutching, means a wider range of speeds under-load in the field.

Knowing the right gear is selected - in any situation and operating from the quietest cab on the market makes for a more relaxing, less stressful day's work. And being able to choose between manual, semi-automatic or fully automatic modes with right or left hand operation reduces the tedium and ensures maximum output at all times.

Features:

- New 24x24 speed Dyna-6 transmission
- 6 Powershift gears
- 4 Ranges
- Choose from manual, semi-automatic or fully automatic modes
- Select from left or right hand operation
- Autodrive
- Speedmatching between ranges.

Contact your local Massey Ferguson dealer for more information.

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MASSEY FERGUSON



WELCOME

Welcome to the second edition of our Acreage magazine. The feedback we got from our first edition was very favourable. We're looking forward to Acreage becoming an ongoing forum for us to let you know what is going on at AGCO, introduce you to new products, and highlight the interesting and innovative things that farmers and other machinery users are doing around New Zealand. Your clever ideas do drive our response as a manufacturer, helping us to change our machinery and support services. Because of that we really do appreciate any feedback you give us.

We have just launched our new Dyna-6 transmission in the Massey Ferguson 6400 series tractors; you can read the article on page 7. The Dyna-6 features 6 semi power shift changes and the ability to run the tractor through all its gears without using the clutch. Maybe that doesn't sound too exciting at first glance, but the increase in productivity and the greater ease of operation provided by the new technology will enable the tractor to deliver further savings. Other articles and features in this edition of Acreage highlight the innovative practices and technologies being adopted by many local farmers. It's

this spirit of innovation that will see New Zealand farmers remain competitive on the international market. In my job I travel extensively throughout Asia and the world. I remain confident that there are many opportunities for local producers to expand their operations by taking advantage of the demand for high quality produce exports.

This positive outlook is reflected in the high number of new tractors being sold, currently running at a five year high. The good news for AGCO is that sales of our products are especially strong, showing that we are growing our business. We believe that our current range of products, with many newly introduced features, are accounting for this growth. And we are looking to keep that growth happening, so keep checking Acreage to see what we are doing as there are more changes coming.



A handwritten signature in white ink that reads "Warwick McCormick". The signature is written in a cursive, flowing style.

Warwick McCormick
Managing Director,
Asia Pacific AGCO



FENDT 716

VARIO TRACTOR TEST

F U T U R E O F F A R M I N G

Tractor technology has come a long way in the past few years, to the point where a modern tractor might have several on-board computers running the show.

Terry Stevenson (of Farm Trader magazine) tests the Fendt's 716 Vario, a machine that impresses with its electronics.



Marc Diprose is a lower-order sharemilker on his parents' family farm. Situated only 5 minutes from Matamata, the mostly flat 70ha farm is used to run 300 cows milked through an 18 a side herringbone shed by Marc and his father Cliff.

The Diprose's have a 50ha run-off 4.5km away, which carries their young stock and around half the herd over winter. Their farm tractor is an 80hp Massey Ferguson 4235, which tackles the feeding out and day-to-

day farm work, including travelling to the run-off. Marc is very happy with the Massey Ferguson, which replaced an old 2WD 265 model, particularly with the sloping bonnet while working with the loader.

For the past four years, Marc's second job has been doing contract work in the Matamata area – now with his 10-month-old Fendt Vario 716 tractor.

Marc explains what drove him into a Fendt. "Basically its reputation is what got us

CUSTOMER PROFILE

looking at it, and the more you look the more you like it. It is very well made. Aside from its electronics, everything is steel with very little plastic – cast everything, and it's a solid tractor. It's compact – a lot of tractors of that horsepower are quite big and clumsy and for the work I do, that's an issue. Around Matamata especially – with the paddock sizes being a bit smaller than elsewhere."

Fendt tractors are produced by around 1900 employees in a small town near Munich, Germany. This year Fendt is celebrating 75 years since their original Dieselross (Diesel Horse) tractor was built by Johann Fendt.

Marc's Vario 716 replaced a 135hp Massey Ferguson 6092 and, while he said he doesn't actually need all of the available 170hp on tap just yet, he certainly doesn't regret choosing an overpowered machine that does the job more easily.

"Probably 150hp is enough, but a little extra is nice for pulling the loader wagon, when full it can weigh a good 10 tonne. It's plenty for the undersower, but then the undersowers are getting bigger and heavier now. It definitely has plenty of power but once you've had plenty, you don't want to go back!"

With a 2700mm wheelbase, the Vario 716 is a

this Fendt. There are three main elements to the Vario system: the joystick, monitor and the control console. There are multi-functions for everything, some even crossover various control modes.

The joystick is the most important driver control, as this is the operator's main take off, accelerate, slow and stop lever all rolled into one. To get going the driver has to pull a safety toggle at the back of the joystick, before pushing the stick forward to signal to the computer that you wish to move forward. Continue to hold it in the forward position and the machine will accelerate to your pre-set speed, or until you bring the stick into the neutral position. Want to slow down? Just pull it back until you reach your

"With the gearbox always at the right speed for the job, it's quite efficient. It uses less fuel than the tractor it replaced, which had 30hp less."

area meter, radar/non radar for ground speed (Marc uses this to gain an accurate area count when drilling and sowing), headland management and a multitude of other functions.

The engine is a 5.7-litre six-cylinder Deutz diesel powerplant with four valves per cylinder and six-hole injection nozzles. It pumps out a fat 169hp from 1800 to 2100rpm, and a whopping 724Nm of torque from 1400 to 1500rpm. That's one flexible (and amazingly quiet) engine.

One of Marc's biggest surprises was that the Vario 716 uses less diesel than the machine it replaced! "With the gearbox always at the right speed for the job, it's quite efficient. It uses less fuel than the tractor it replaced, which had 30hp less. So it's definitely a bonus in that area," Marc said.

Even though it has a clutch and a foot throttle, by far the best way to drive this Fendt is by setting the engine speed (with two adjustable rpm speeds) on the dial and using the joystick for forward movement. For my benefit we first electronically swapped forward and reverse control from the joystick to the left hand shuttle, which I'm more used to. But after a short time I found the joystick was a better system, it just takes getting used to.



relatively small tractor for its power output. Diprose took it up some steep hills where I thought it would really struggle. Even on wet ground, the Fendt's wheels hardly slipped as it clawed its way upwards in 4WD. The variable drive definitely showed its mettle and worth: if it can get up those sorts of inclines, imagine the situations it can get out of in a difficult paddock with a large implement on the back. The Variotronic controller is the heart of

desired speed, or hold it back and the 6200kg Fendt will stop in its tracks.

The real value for the contractor is the Vario system that allows the operator to adjust and control just about everything. Like hydraulic pumping flow rates and durations, linkage rise, fall and height, transmission, PTO take-up, rpm and slow down speeds, clutch action, wheel slip, pre-set memories for different implements, an

There are far too many features on the Fendt to list them all, but I was taken by the build quality and sheer strength of even the over engineered steel plates and bars, which the wide front guards mount onto. Check out the big stabiliser bars and the huge cast chassis. The rear guards are extended to entirely cover the Pirelli tyres while the seven radiators are all easily accessible to clean – one of the best.

TIME YOU GOT NARROW MINDED.



80-98hp

NEW MF3400 EVERY ONE A THOROUGHbred

It's part and parcel of the way your farm works – narrow rows with very different kinds of crops – vines, fruits, olives – the kind of specialty farming that requires a specialty solution. So there's nothing wrong with being narrow minded – particularly when it comes to a quality tractor ... like the New MF3400 Series of specialty tractors.

- 4 models from 80 - 98hp – powered by rugged, dependable Tier II Perkins engines
- GE (Ground Effect) 80hp ROPS model – very low to the ground, with low centre of gravity and overall height of 51"
- Smooth-profile cab models minimise crop damage and provide excellent visibility
- Non-intrusive folding ROPS frame
- Synchro-shuttle transmissions, with pressure lubrication and helical cut gears, for durability and long life
- High flow, open centre hydraulics, with three rear remote valves
- Standard with mid hydraulic outlets to reduce crop snagging and damage
- Electro-hydraulically controlled 540/750/1000 PTO

For more information on the new MF3400 Series,
contact your Massey Ferguson Dealer.

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Dyna-6

The next generation transmission option for more output on mid-range tractors.

Continuing the MF Dynashift transmission's reputation for efficiency and reliability, Dyna-6 is a newly advanced design that provides an additional transmission choice between the renowned 32F/32R Dynashift and Massey Ferguson's continuously variable Dyna-VT transmissions. "In essence, Dyna-6 is the next generation of semi-powershift transmissions. It builds on the proven features of Dynashift," says Martin Wakely, MF Sales Engineer. "Massey Ferguson has long enjoyed a reputation for producing straightforward transmission controls, and the Dyna-6 is no exception."

The new transmission further enhances operator control and convenience as well as improving the tractor's efficiency by increasing output and saving fuel. Six Dynashift powershift changes in every gear provide a wider speed range for shifting under load in the field and on the road. The semi powershift gearbox – with 4 ranges and 6 Dynashift ratios offering 24 forward and 24 reverse speeds – provides smooth shuttling and gear changes, as well as automatic shifting modes, giving increased output and fuel savings. ECO feature as standard (not MF 6445 and MF 6455) offers speeds up to 40 km/h at just 1800 rev/min.

After tractor start-up, with the Dyna-6 there is no clutch pedal operation. The unique Power Control lever on the left of dashboard is used to de-clutch, change Dynashift ratio and change direction. The Rotary AutoDrive Controller Dial can be set to either manual or automatic mode, enabling the operator to control the gearbox in the way that he most prefers to drive. Manual operation allows the

driver to choose for himself the best ratio to suit conditions. Speedmatching in field mode allows the operator to change up and down Dynashift ratios. In transport mode, by moving the transmission lever either backwards or forwards, it will change both Dynashift gears and ratios. Autodrive



"It allows a farm enterprise to match machine and transmission precisely to business needs and achieve top-level output."

enables operators to adjust the engine speed at which AutoDrive will automatically upshift, and also automatically downshift according to load. Creep and Supercreep options are also available to provide up to 48 forward and 48 reverse speeds.

Gear selection is from either the armrest-mounted gear lever or the familiar left-hand Power Control lever. The Power Control lever provides convenient forward/reverse shuttle, Dynashift changes (as well as range changes in the transport mode) and fingertip de-clutching leaving the right-hand free to operate front and rear mounted implements. Two controls on the right-hand side include the new 'T'-shaped gear lever and the range

selection button. The 'T' lever changes Dyna-6 speeds either singularly with a 'pulse', or for more rapid changing, by holding the lever forward or backwards. Pressing the range selection button whilst moving the 'T' lever changes gear ratios without using the clutch. Shuttle operations are also programmable (independently for forward

and reverse) to reduce repetitive tasks and accelerate cycle times.

"Massey Ferguson's transmission strategy – incorporating MF Dynashift, MF Dyna-6 and MF Dyna-VT provides an outstanding choice of options for the MF 6400, MF 7400 and MF 8400 award-winning tractor ranges," comments Declan Hayden, MF Vice-President Marketing. "It allows a farm enterprise to match machine and transmission precisely to business needs and achieve top-level output. Coupled with MF's excellent operator environment – with features like the quietest cab and dual-stage cab suspension – there's never been a better time to buy Massey Ferguson."

PRECISION FARMING TECHNOLOGY

NOW ON-BOARD

AT MASSEY



"It is a low-cost and effective way of enhancing productivity and meeting the requirements... for monitoring and traceability."

NEW SOFTWARE LINKS MACHINE OPERATIONS TO FARM COMPUTER

Customers can now benefit even more from their MF 6400, MF 7400 and MF 8400 tractors with the launch of a straightforward link between the tractor's Datatronic III monitoring and control system and the farm office PC.

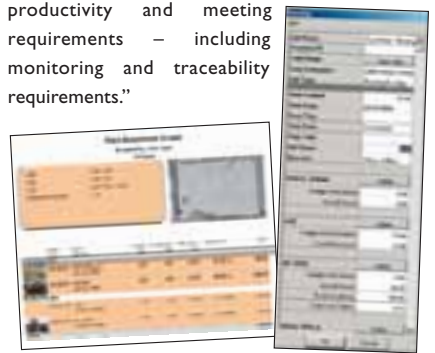
Developed by Global Technologies by AGCO (GTA), Massey Ferguson's simple-to-use, low-cost monitoring/console package logs machine and operating information – important for crop traceability and record keeping requirements. It enables the information to be transferred from any MF tractor fitted with the

GTA Console to an office PC.

Tractors fitted with the GTA Console will receive GTA100 Communicator as standard. Machine and field data logged by the GTA Console can then be transferred by SD (Secure Digital) card into the GTA100 Communicator software on the office PC to enable machine use and job data to be viewed and exported – for use by third-party farm management programs. Further enhancement of the analysis of transferred data is available with the installation of the optional GTA200 Record Keeping, which allows machine performance data to be allocated to a specific job or field to produce a range of reports. As a result, easy-to-compile field and machine

records and printable reports can provide crop traceability.

"The software provides a user-friendly method of getting the most from data logged on the GTA Console," explains Campbell Scott, Massey Ferguson's General Sales Engineering Manager. "This data can be quickly downloaded to a desktop PC where the software organises it into reports for equipment or fields. It is a low-cost and effective way of enhancing productivity and meeting requirements – including monitoring and traceability requirements."



FULL-COLOUR TERMINAL

Developed by Global Technologies by AGCO, the GTA Console is MF's new operator interface for tractor management and future implement control. The console features a full-colour 140 mm TFT screen where data from Datatronic III is displayed. Using an SD (Secure Digital) card, valuable operating data can also be downloaded and transferred to the office computer via GTA Communicator software, which can be used for management of records, analysis of both field and tractor data plus export of data to third party farm management programs.

Now your tractor can help with the paperwork!

POWERING NZ

On a property 10 kilometres west of Taupo, you'll come across what surely must be the ultimate farm diversification project. **Tony Hopkinson**, from Rural News, finds out more.

The Geotherm Group is entirely owned by the McLachlan family. Their farm, Waituruturu Station, has been owned by Alistair McLachlan since 1965 when it was a 200ha ballot farm. Since then, with the addition of adjoining land, it has been expanded to 450ha, and is managed by his sons Craig and Euan. Now the Geotherm Group is building a steam powered generating plant on the property, hoping to produce 60 megawatts of electricity which will be carried by underground cable and fed into the national grid. Described as flat to medium hill country, and with an average rainfall of 1150mm, the farm runs 2200 Romney ewes and 500 replacements along with 270 straight bred Angus cows with 50 two-year and 55 one-year replacements. There is also a

shifting 1,000,000 cubic metres to provide a 6.5ha flat location for the drilling area. This area will have concrete pads built to support the weight of the rig.

The Parker drilling rig is on its way from Houston, Texas, where it has been refurbished. It is capable of drilling 4km deep if required as well as being able to drill diverted wells.

The rig will be 56m tall with the drilling platform 15m above ground. This will be serviced by a lift for staff and gear. It has a Tesco Top Drive, and will be driven by seven 1500hp Caterpillar engines. This impressive piece of machinery can drill three times faster than normal, drilling 90m at once rather than the

As part of the on-going farming operation and to assist around the power site if needed, Waituruturu station has bought two of the latest model Massey-Ferguson 140hp tractors from local agent Taupo Tractor and Machinery Ltd.

"We have always had 'Fergys' since Dad's day and his original TA28 is still in the shed," says Euan.

They already have two MF135s and one MF165. They harvest four cuts of Lucerne each season from 25ha and two cuts of hay from 40-50ha of flats. Swedes and Kale are planted for winter feed. There is no outside contracting.

The McLachlan brothers are keen on the latest Dyna-6 transmission in these models



Impression of the geothermal power plant to be built.



Euan and Craig McLachlan with their Massey-Fergusons for use around the farm and the geothermal power plant site.

Southdown stud, 'Waituruturu,' owned and managed by Euan. Part of the farm is now being prepared for drilling and building what is believed to be the largest privately owned geothermal powered electricity station in the world. Sixteen bores will bring 70,000 tonnes of fluid per day at 125°C to the surface, which will produce 10,800t of steam to drive the generators.

The power project is estimated to cost \$330 million including the cost of site preparation, the purchase of a drilling rig, the building of a generating plant and a 650 square metre warehouse and production centre as well as office space. Site preparation has included

normal 30m. Thirty men will operate the rig.

The plan is to drill 16 production wells to a depth of up to three kilometres and then a further eight wells to 500m below the production zone for the re-injection of separated fluids to maintain pressure and remove the risk of subsidence.

Drilling will start in the middle of December and it will take a year to complete all wells.

The first electricity will join the national grid in July 2008 and the balance by September 2008. Up to 300 personnel will be employed during the building and drilling and when completed there will be ten people to run the power station and ten office staff.

claimed by the makers to be the next generation of semi-powershift transmissions. When using the tractors the driver can choose at any time exactly the level of transmission automation they want: manual, semi automatic or automatic.

"You can drive the tractor without using the clutch for gear and ratio changes as well as forward and reverse work," says dealer Terry Cameron.

The McLachlan brothers are both looking forward to putting the Masseys to work on their ambitious new project.

"The tractors are so easy to operate and are a pleasure to drive," says Craig.



BALE TRAINING A HIT WITH CUSTOMERS

It appears that taking a yearly refresher course in large square baler operation is the done thing, or so it seems if the turnouts for the Massey Ferguson large baler clinics are anything to go by.

The annual clinics conducted around Australia and New Zealand have once again attracted large numbers of owners and operators.

"We have had over 500 customers through our baler clinics this year," said John Russell, Product Manager for Massey Ferguson Hay Equipment. He went on to say that "of those 500 attending at least 60% of them would have attended our clinics last season."

The clinics, which have now been running for over 5 years, allow operators to get the

latest information on maintaining, setting up and maximising the performance of the MF range of large square balers. The clinics offer customers a hands-on style of training with demonstrations on machine setup, knotter adjustments, maintenance tips and informative demonstrations on twine. "We like to run the clinics in an open forum style where operators can relate their experiences during the course of the day, any tips from the field really help new owners," said Mr Russell.

The clinics also offer an open session for

the operators so that they can pass on any issues relating to design, performance or reliability. This information is then passed directly through to the engineering section at the Hesston factory, ensuring designs meet the demanding needs in the field. "Australian & New Zealand conditions can sometimes be the toughest conditions. On average we produce many more bales per machine compared to other countries, so the data we can provide back to the design and manufacturing source in our Hesston plant is invaluable," says Mr Russell.

BALER TRAINING

NEW MASSEY FERGUSON PRODUCT MANAGER HAY EQUIPMENT

"It's an exciting time to be a part of AGCO. Our Massey Ferguson square balers are now the market leaders and have an excellent reputation backed with a strong Hesston heritage. I look forward to working with our dealers and customers and bringing them the latest developments in our hay range," says John.

John Russell has been appointed as the new Product Manager for Massey Ferguson Hay Equipment.

Mr. Russell joined AGCO in 1999 and has recently been responsible for the product management of the Massey Ferguson tractor range. Mr. Russell takes on the position with strong credentials in the hay industry and a lifelong background in the agricultural machinery industry. Qualifications in engineering are well complemented with time spent working in most of Australia's agricultural regions.

"It's an exciting time to be a part of AGCO. Our Massey Ferguson square balers are now the market leaders and have an excellent reputation backed with a strong Hesston heritage. I look forward to working with our dealers and customers and bringing them the latest developments in our hay range," says John.

Making up the hay equipment range are 4 models of square balers ranging in sizes from the smaller MF139 model which produces a 14"x18" bale to the larger MF190 model producing a 46.5"x50" bale. Also included in the product line are two self-propelled swather models rated at 110hp and 185hp; 25 foot and 30 foot PTO swathers and two mower conditioner models with a 12 foot and 15 foot cutting width. All Massey Ferguson hay equipment is produced at the Hesston factory in Kansas, USA.



In five years, the clinics have seen over 1300 customers through the door. With numbers increasing on a yearly basis, there was a need to divide the training clinics into two sessions. The first session was conducted to make first time owner operators familiar with their balers, which in turn allowed them to take part in the second session that included experienced operators.

Those attending the clinics included many customers who have owned and operated Hesston designed balers for more than 15 years. "It's refreshing to see these guys coming back year after year and still telling you at the end of the training that they picked something up during the course of the day," said Mr Russell.

AGCO are already putting together a schedule for next season. To find out more about the clinics and when they will be held next year you can contact your local Massey Ferguson dealer.



FENDT STANDS ALONE

**Second best doesn't cut it. You know it.
We know it. That's why we build Fendt tractors.**

Fendt is for people who genuinely understand the value
of investing in technology that delivers.

Year after year after year.

The Fendt Vario drive technology, including variable
transmission, wasn't just the first on the market.

It's the best on the market. There's plenty that try,
but none compare.

Quite apart from technology, we focus on premium build
specifications, the finest quality materials and
unparalleled dealer support.

From 80hp to 300hp... Fendt stands alone.

FENDT

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