

TVT



NEW HOLLAND

New Holland TVT tractors

Models TVT135, TVT145, TVT155, TVT170 and TVT190



Stylish and sophisticated but easy to drive.

Bristling with new and innovative features, stunning Series TVT tractors offer one key feature that really sets them apart. Ease of operation. Within minutes, an operator new to these quiet and economical tractors will feel perfectly at ease. The continuously variable Auto Command™ transmission may be among the most sophisticated ever found in a New Holland tractor, but it is also possibly the easiest to set up and fully utilise for optimum productivity. Spanning 137 to 192hp(CV), the five model TVT tractor range offers discerning users the very best in modern tractor design, backed by the reassurance of the global support of New Holland. Series TVT. A seamless shift to higher productivity.





Great looks with comfort and high visibility as standard

Series TVT are easy on the eye in more ways than one. The New Holland family style offers more than just great looks as it also reduces the amount of bodywork in the operator's line of sight. Over the engine hood and to its sides, the view ahead is unimpaired. Look out through the side and rear of the cab and see exactly what is going on. New Holland style and forward thinking helps you see more clearly.



Concentrating on the job

New Holland has invested a great deal in making the continuously variable Auto Command™ transmission in Series TVT tractors easy to use. There is no need to scroll through complex menus. In the field or on the road, the operator controls travel speed with the throttle. Both engine speed and the transmission adjust automatically to optimise performance and economy, with full manual control always available. Active StopStart allows the tractor to be brought to a controlled standstill, even on a steep incline, without applying the hand brake or parking lock. Ease of operation and safety are standard with Series TVT.



A specification for the most demanding operators

The list of standard features common to all models is extensive, making Series TVT among the best equipped tractor ranges available. From a cab cool box to advanced performance monitoring, TVT has it all. There is also a wide range of enhancements available, specially developed for owner operators looking to further enhance their tractor's specification. A fully integrated front linkage and PTO system can be fitted to optimise productivity. BiDrive™ reversible drive can be specified. With New Holland, you always have a choice.

Concentrate on the job, not the tractor.

Settle back into the seat of a Series TVT cab and it is clear why these advanced tractors offer so much. All-round visibility is excellent. The controls are grouped logically. Within minutes, the working environment feels familiar.

The all-important AutoController™ joystick on the armrest presents push button access to key transmission and hydraulic functions. Without resorting to an instruction manual, the function of each control button is easy to understand. Related information is always there when needed, but never a distraction.

Getting comfortable is easy too.

The steering column adjusts for rake and reach and the air suspension seat can be set to suit operators of every shape and size. The cab is whisper quiet, with noise levels of just 72dB(A).

A typically modern working environment from New Holland.



Comfort tailored to your needs

Comfort levels are enhanced by specifying Comfort Ride™ cab suspension. For fast top work, such as mowing and top dressing, Comfort Ride helps reduce shock loads reaching the operator. When combined with Terraglide™ independent wheel suspension, which is standard on the TVT170 and TVT190, shock loads are reduced still further. For total comfort, a heated deluxe air seat, with horizontal and lateral suspension, lumbar support and active carbon seat cushion, is available.



BiDrive™ reverse drive for optimum flexibility

From the outset, Series TVT tractors have been designed to enable the BiDrive™ reverse drive to be specified. The seat, complete with the AutoController armrest, turns to face the rear of the tractor and a second steering wheel. Operating reverse drive equipment, such as a mower or snow blower, is possible within minutes.

Information to help, not confuse

Two information / performance monitors are standard. The first is integrated into the main dash, and will indicate area covered, PTO speed, wheel slip, fuel consumption and other performance related data. The second unit is on the cab "A" pillar. This will show cruise control speeds selected, which Headland Turn Sequence functions have been selected or set up and will also show the individual flow rates to the electronically controlled remote valves.



See more, do more

Visibility is a key design priority at New Holland. Slim styling and a fully glazed cab are important starting points. Getting the most from these features at night calls for carefully positioned working lights with enough adjustment to suit a range of front and rear mounted implements. As standard, there are five key work light stations to provide first class illumination to the front, sides and rear. For transport safety, large heated rear view mirrors, on telescopic arms, are available.



Dual Zone temperature control

Simple to use Dual Zone heating and ventilation is standard. Controls and vents on the front console set floor heating and de-misting. Separate roof vents and controls manage the air conditioning. A roof hatch and opening side and rear windows are also fitted if 'natural' ventilation is desired. For added luxury, a large in-cab cool box is available.



Optimised for performance, economy and smooth running.

The 6.6 litre, six-cylinder engines powering Series TVT tractors benefit from the latest engine technology and are optimised for performance and economy. Thanks to an extremely robust and reliable CAN BUS system, they are fully integrated with Auto Command™ transmission and the AutoController™ joystick. All you have to do is enjoy the benefits of optimised engine performance and fuel economy.

Low speed at rated power

At rated speed, the engines run at a low 2100rpm. This reduces noise, vibration and wear. Maximum torque is developed at 1400rpm, with a generous torque rise of up to 39%. These features combine with superb engine management and engine-transmission integration. Fuel use is constantly monitored and optimised to reduce running costs. By combining a low specific fuel consumption of 201g/kWh with an ample standard fuel capacity of 310 litres, Series TVT tractors are able to work long hours without refuelling. Where quiet, smooth running and economical performance are priorities, Series TVT can deliver.

Eco-Fan available for constant cooling

Developed to enable the engine and related air conditioning and oil cooling radiators to be blown clean during work, the Eco-Fan benefits from “variable blade pitch” technology. The volume of cooling air drawn through the radiators is automatically adjusted according to temperature, with the power required by the fan usually less than normally used by a standard viscous coupled unit. The Eco-Fan is of particular benefit when operating front mounted equipment.





The performance characteristics speak for themselves

The engine performance characteristics of each Series TVT model have been optimised to ensure rated PTO speeds are produced at sustainable engine speeds. Fluctuating loads on the PTO can be accommodated by the engine's power and torque.

For demanding PTO applications, Series TVT are the tractors to beat.



TVT – with the transmission that is easy to get the most from.



Series TVT's constantly variable Auto Command™ transmissions have no fixed gear ratios and can potentially deliver speeds from 0 to 50kph. In practice, this means a transport speed of 40kph can be achieved at a fuel sipping 1510rpm and 50kph at 1890rpm. In the field, Auto Command™ transmission works with the engine to produce maximum economy or maintain PTO performance automatically. For fixed speed applications, a choice of three speed ranges can be selected for greater drive pedal sensitivity. Operational versatility is enhanced still further by up to three Cruise Control modes. Of arguably greater importance is the fact that Auto Command™ transmission is really simple to set up. It can even be operated in a similar fashion to a conventional full powershift. Whether you choose the automatic or manual approach, there is no need to scroll through complex menus to achieve your objective.



Active StopStart for complete confidence

Auto Command™ transmission incorporates unique Active StopStart, a fully automated system to improve safety and operator efficiency. There is no need to engage the brakes at road junctions. The transmission will hold the tractor and its load securely, even on a steep incline. Starting off under full load, such as pulling a heavy trailer from a standing start, is achieved with no operator input other than use of the drive pedal. No slipping back. No stalling. Just a clean start. The system is backed up by a mechanical parking lock. With Series TVT, safety and ease of operation go hand in hand.

Intelligent link between transmission and engine

By linking the engine's control and Auto Command™ transmission in Drive and PTO modes, optimum performance can be delivered completely automatically. When Drive mode is selected, the engine and transmission will maintain a selected forward speed at the most economical engine speed possible. In PTO mode, engine and PTO constant speeds are the priority. A load limit sensing control dial allows the operator to intervene in favour of either performance or economy under extreme operating conditions. A separate manual mode can also be selected to enable the engine and transmission to operate independently.

AutoController™ joystick makes everything simple

All transmission functions are accessed via the AutoController; Drive and PTO modes are selected automatically but can be overridden. A push button selects a speed range, with a choice of 0-max, 0-25kph and 0-14kph. Cruise Control on/off and speed increase/decrease are selected by easily identified buttons. No need for an instruction manual, it really is that easy to understand.



Optimised traction, minimised compaction.

A choice of standard, Terraglide™ independent front wheel suspension and disc-braked Terraglide axles is available. Both the TVT170 and TVT190 feature Terraglide as standard. All models benefit from automatic four-wheel drive engagement and advanced TerraLock™ differential lock management. This advanced traction management system is designed to work in tandem with Headland Turn Sequencing to reduce operator input when making a turn. A key feature of Series TVT is their excellent power to weight ratios. Where low ground bearing pressures are vital to avoid compaction, these relatively low weight tractors can be specified with 710/70R38 tyres.



Agile, scuff free turns

The wheel camber of the front wheels at their full 50 degree turn angle is kept close to vertical to maintain a full tyre to ground contact patch. This helps to reduce turn induced compaction and retain optimum steering control. The turn radius can be as low as 5.4m, without brakes.





TerraLock™ traction management

TerraLock™ traction management is a well proven New Holland feature. When selected via a simple rocker switch in the cab, the system will automatically lock the front and rear axle differentials to ensure all wheels are driven in adverse conditions. Four-wheel drive is automatically selected when forward speeds exceed fixed parameters and under braking for maximum stability. Controlled via separate switches, both TerraLock™ traction management and auto four-wheel drive can be deactivated if necessary.



Terraglide™ independent front wheel suspension

Purpose developed to match the potential high transport speeds of TVT tractors, Terraglide™ independent front wheel suspension delivers automotive levels of steering precision at higher speeds. In the field, the system helps to reduce shock loads reaching the operator, offering maximum benefit when specified with Comfort Ride™ cab suspension. As with all New Holland Terraglide™ axles, the suspension can be locked for applications including loader and front linkage work.



Intuitive controls maximise productivity.

No matter how much effort goes into designing a tractor, any performance enhancing features are wasted if they cannot be easily accessed and understood by the operator. New Holland has unrivalled experience in making both manual and automatic functions simple to operate. Proven technology, for example, makes Headland Turn Sequencing, HTS, easy to master. A key control on TVT tractors, however, is the AutoController™ joystick. The seven buttons on this armrest-mounted unit have functions familiar to operators of a modern tractor without the need to resort to complex menus or instruction manuals. Take half a day to work with a TVT tractor and appreciate for yourself how the fully integrated control systems combine to make operating a TVT simple and fantastically productive.



Headland Turn Sequencing and Engine Speed Reduction

HTS, the proven New Holland headland turn sequencing system, can store two programmes, each comprising up to 30 operations performed at the headland. These can include raising and lowering the hitch, remote valve operation, controlling the Auto PTO and even activating the Eco-Fan. Engine Speed Reduction allows the engine speed to be reduced to a pre-set level when the hitch is raised and increased when lowered. With TVT, the controls are designed to make your life easier.



AutoController™ joystick puts you in command

Just three buttons on the AutoController™ joystick are all that are needed to interface with the advanced Auto Command™ transmission; plus and minus buttons increase or decrease speed at a fixed throttle setting and a third button turns fixed speed Cruise Control on or off for manual control.



CAN BUS and ISO BUS technology makes everything simpler

A key New Holland development strategy is to make the interface between a tractor and its implements fully integrated. ISO BUS is the tractor equivalent of computer 'plug and play'; hitch up a compatible machine, such as a New Holland baler, and the ISO BUS system will recognise it, automatically linking the baler and tractor controls to make setting up and operation easier.



Work the hydraulics by shifting your thumb

To raise or lower the rear linkage, press the yellow button. To work a remote valve, operate the elongated light blue button.

To select a headland turn sequencing function, push the square dark blue button. To change direction, operate the round red button. Hardly confusing. Mastering these features is as straightforward as it is on any New Holland tractor.



Hydraulic muscle and PTO flexibility.

For sheer hydraulic lifting performance Series TVT is hard to beat, with a maximum lift capacity of 9900kg for all five models. Similarly capable of handling the most demanding applications is the advanced load sensing CCLS pump, delivering 105l/min, climbing to 130l/min when the MegaFlow™ pump is specified. The system is extremely efficient, with precise and rapid pump control ensuring true performance on demand. When the hydraulics are idle, the pump does not waste energy pumping oil, which in turn reduces wear and saves fuel. Four PTO speeds, to provide 540 and 1000rpm and related economy speeds, are standard. A fully integrated front linkage and PTO system is also available.



Advanced Electronic Draft Control

Electronic Draft Control, EDC, with Dynamic Ride Control has been used on New Holland tractors for a number of years. Dynamic Ride Control ensures that shock loads transmitted to the tractor by a heavy mounted implement are dampened for a safer and smoother ride. EDC is extremely simple to set up, but has all the features you would expect.



Fuel saving economy speeds for lighter duties

Four PTO speeds, 540 / 540E / 1000 / 1000E rpm, are standard on Series TVT models. Rear PTO includes an Auto PTO system, which cuts drive to the implement when the linkage is raised. The system will re-engage drive when the linkage is lowered to a fixed point, modulating power delivered to protect the driveline. Rear fender PTO control is standard. A fully integrated front PTO system, again with external controls, is also available.



Close coupled front hitch and PTO for optimum performance

The unique factory front hitch and PTO, which can be specified for Series TVT tractors is close coupled to the front axle. This optimises weight transfer to the front wheels. Completely integrated with the tractor, the front hitch features a sensor for position control and separate external raise and lower buttons to make hitching attachments faster and easier. Hydraulic remote valves are also available to match specific applications.

All the valves, with all the control, you need

As standard, at least three electronic hydraulic remote EHR valves are fitted. Up to five are available, each controlled at the unique arm rest control. All remotes are programmable at the A-post control centre for flow volume and timing and two can be proportionally controlled via a fully integrated joystick. One remote valve can also be controlled via an external control on the rear fender. A power beyond slice and free flow return are also available.

New Holland. Understanding your day to day needs.

New Holland understands that the needs of customer's goes beyond the product. The innovative Series TVT tractor range is supported by dealers who understand local conditions. Each tractor can be specified to meet these conditions. After sales support is another area where New Holland has made huge investments. Training and parts support are key ingredients in a professional partnership with customers. The best support in the market comes as standard. Typically New Holland.

The best advice and support

New Holland recognises the importance of its dealers. They are your first port of call for more information and advice. From delivery and service through to finance and extended warranties, your New Holland dealer is your business partner.

Genuine value

New Holland products are designed to offer the best performance to help you maximise the return on your investment. Built to exacting quality standards, New Holland equipment delivers reduced whole life operating costs to provide the best value.





World class parts availability

When replacement parts are required, local dealerships will be able to supply the majority off the shelf.



Dealer fitted accessories

New Holland is a global brand. To optimise machine performance in all operating conditions, a comprehensive range of approved accessories can be supplied and fitted by your New Holland dealer.



Tailored finance packages

Different regions, varied applications and individual customer demands. It all adds up to a wide variety of requirements. New Holland understands the need for flexibility and provides a range of finance packages to suit.



Trained technicians

Down time is the enemy of productivity, especially during peak work periods. New Holland technicians are trained to quickly resolve any problems and keep you working.



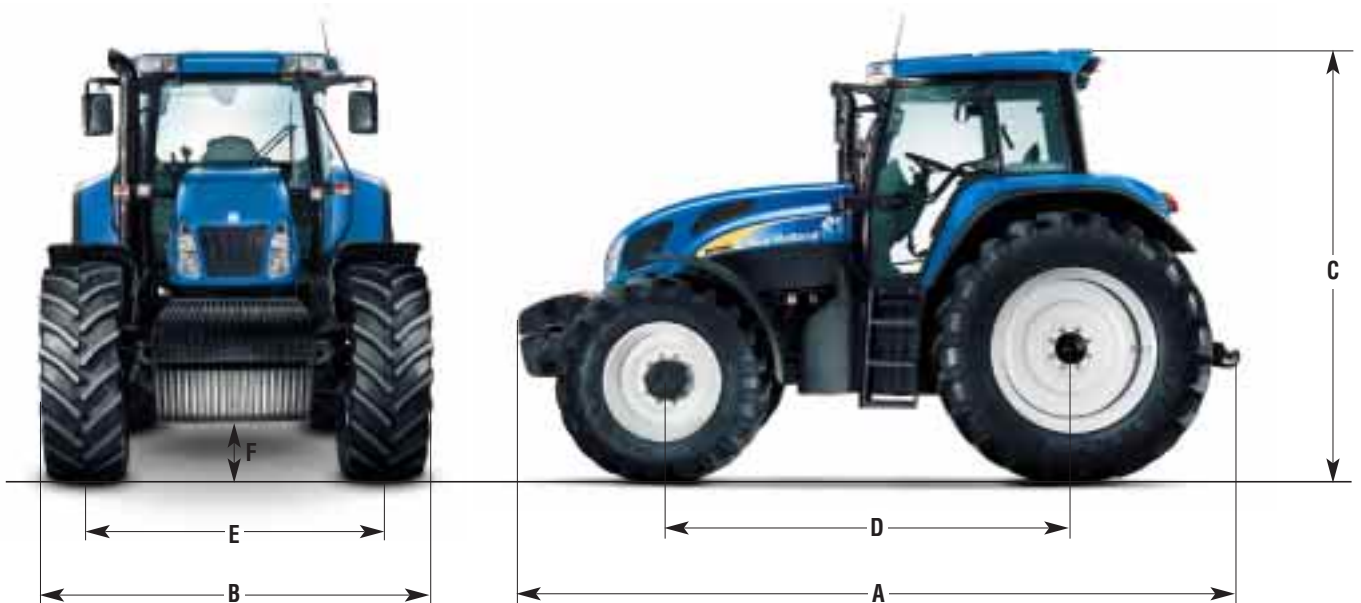
Specifications.

		TVT135	TVT145	TVT155	TVT170	TVT190
Engines						
No. of cylinders / aspiration / emission level		6 / Turbocharged with intercooler / Tier II				
Capacity	(cm ³)	6600	6600	6600	6600	6600
Bore x stroke	(mm)	108x120	108x120	108x120	108x120	108x120
Rated engine power ISO TR14396 - 2000/25/EC	[kW/hp(CV)]	101 / 137	108 / 147	115 / 156	126 / 171	141 / 192
Rated engine speed	(rpm)	2100	2100	2100	2100	2100
Maximum engine power ISO TR14396 - 2000/25/EC	[kW/hp(CV)]	102 / 139	109 / 148	117 / 159	128 / 174	142 / 193
...at engine speed	(rpm)	1900	1900	1900	1900	1900
Max. torque	(Nm)	570	610	660	725	790
...at engine speed	(rpm)	1400	1400	1400	1400	1500
Torque rise at PTO	(%)	38	38	39	39	35
Fuel capacity	(l)	310	310	310	310	310
Service Interval	(hrs)	500	500	500	500	500
Auto Command™ 50kph Transmission						
Type		Continuously variable transmission				
Travel speed ranges		1 st range 0 - 14kph, 2 nd range 0 - 25kph and 3 rd range 0 - 40 (50)kph				
Operating modes						
Drive mode (automatic)		Variable engine speed and transmission ratio for maintaining the optimal fuel consumption				
PTO mode (automatic)		Fixed engine speed and variable transmission ratio, PTO speed is kept constant				
Manual mode (selectable)		Engine speed and PTO speed change in line with the travelling speed				
Axles						
4WD engagement		electro-hydraulic	electro-hydraulic	electro-hydraulic	electro-hydraulic	electro-hydraulic
Terraglide™ independent wheel suspension		○	○	○	●	●
TerraLock™ Auto 4WD and diff. lock engagement		●	●	●	●	●
Hydraulics						
Closed centre load sensing:						
Total oil flow standard / optional	(lpm)	105 / 130	105 / 130	105 / 130	130 / –	130 / –
Maximum system pressure	(bar)	205	205	205	205	205
Electronic Draft Control		EDC	EDC	EDC	EDC	EDC
Remote valves						
Type		Deluxe	Deluxe	Deluxe	Deluxe	Deluxe
Max. number		5	5	5	5	5
Linkage						
Maximum lift capacity at ball ends with arms horizontal	(kg)	9900	9900	9900	9900	9900
Continuous lift capacity through the range (610mm behind bar ends)	(kg)	7100	7100	7100	7100	7100
Front hitch max. lift capacity	(kg)	4000	4000	4000	4000	4000
PTO						
Engine speed at:						
540rpm	(rpm)	1878	1878	1878	1878	1878
540 Economy rpm	(rpm)	1608	1608	1608	1608	1608
1000rpm	(rpm)	1869	1869	1869	1869	1869
1000 Economy rpm	(rpm)	1600	1600	1600	1600	1600
PTO activation Soft Start		electro-hydraulic	electro-hydraulic	electro-hydraulic	electro-hydraulic	electro-hydraulic
Front PTO / Engine speed	(rpm)	1000 / 1869	1000 / 1869	1000 / 1869	1000 / 1869	1000 / 1869
Cab						
Air suspension seat		●	●	●	●	●
Air conditioning		●	●	●	●	●
Air re-circulation filters		●	●	●	●	●
Comfort Ride™ suspended cab		○	○	○	○	○
CAN-bus electronics		●	●	●	●	●
ISO-bus compatible (ISO 11786)		●	●	●	●	●
IntelliView™ monitor		○	○	○	○	○
Cab noise level OECD	(dBA)	72.0	72.0	72.0	72.0	72.0

		TVT135	TVT145	TVT155	TVT170	TVT190
Turn radius at narrowest track setting						
Optimum turn radius	(mm)	5400	5400	5400	5400	5400
Turn angle	(°)	50	50	50	50	50
Dimensions* on standard tyres						
A Overall length inc. weight pack and rear linkage	(mm)	4740	4740	4740	4766	4766
B Minimum width	(mm)	2490	2490	2490	2490	2490
C Overall height	(mm)	3000	3000	3000	3000	3000
D Wheelbase	(mm)	2806	2806	2806	2832	2832
E Track width						
Front minimum	(mm)	1898	1898	1898	1908	1908
Rear minimum	(mm)	1870	1870	1870	1870	1870
F Ground clearance	(mm)	500	500	500	500	500
Weights*						
Minimum weight	(kg)	6390	6390	6490	6770	6770
Maximum permissible total weight	(kg)	10000	10000	11500	11500	11500
Standard Tyres*						
Front		540/65 R28	540/65 R28	540/65 R28	540/65 R28	540/65 R28
Rear		650/65 R38	650/65 R38	650/65 R38	650/65 R38	650/65 R38

* to comply with legislation and specification in your country

● Standard ○ Optional at extra cost – Not available





A great family of specialists at work.

All New Holland people and products are special and have specific tasks: to meet customers' demands and to ensure customers' success. That is why farmers with specific working needs who are serious about their future trust New Holland and its world wide dealer network. They know that here they can find all the technological innovations that increase their productivity and confidence; more flexible and convenient finance packages, designed by people who understand agriculture; service that makes the difference, with prompt and efficient assistance in the workshop and the field and New Holland Original Parts - readily available for all types of machine and models. They know that New Holland people will understand them, because New Holland people think the way they do. New Holland is a great family of specialists, which together with its customers, is growing every day. Visit our web site or call free phone number - for UK: www.newholland.com/uk - tel: **0800 015 0105** for ROI: www.newholland.com/ie - tel: **1 800 523 174**



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Your success – Our specialty

The data indicated in this folder are approximate. The models described here can be subjected to modifications without any notice by the manufacturer. The drawings and photos may refer to equipment that is either optional or intended for other countries. Please apply to our Sales Network for any further information.
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AT YOUR OWN DEALERSHIP



NEW HOLLAND IS A BRAND OF CNH.
CNH: A WORLD-LEADING MANUFACTURER OF TRACTORS, COMBINES AND BALERS.

New Holland prefers **AMSOIL** lubricants