

Challenger

WORKHORSE in SHINING ARMOR

MT500D Series Wheeled Tractors
MT515D | MT525D | MT535D | MT545D | MT555D | MT565D | MT575D | MT585D | MT595D



Challenger





When you farm in the world's most demanding environments, it takes a strong will and equally uncompromising equipment to get the job done. At Challenger®, we understand this. So we design machines that tackle the widest fields, steepest hills and tightest planting and harvesting windows. And behind every Challenger machine, you'll find an authorized dealer who's equally up to the task.



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Up for **DOWN SIZING** any task.

With more power, increased efficiency and unprecedented ergonomic control, the new Challenger MT500D Series is your steadfast partner in getting more done in less time.

Whether you're planting or pulling a grain cart, the MT500D Series adapts to any situation, beautifully. For hay or dairy applications, it's a natural at pulling all sizes of round or square balers. As a loader, the multifunction joystick is highly intuitive to the operator.

From inside out, the MT500D has all the comfort and control to keep a long day on the farm from feeling that way.

An available CVT transmission excels at maximizing torque while delivering unmatched ease of use. Power Management increases fuel efficiency and the industry-exclusive Forager mode bales more hay in less time. Plus, the MT500D performs all these tasks with the reliability that your work demands. Whatever you need to do, it redefines expectations of what a tractor should be — in the field and in the cab.



Need a **DAY-IN, DAY-OUT TRACTOR?**

— We have nine. —

Model	Engine	Cylinders	Displacement	Engine HP	PTO HP	Transmission
MT515D	AGCO POWER	6	6.6L	130	110	AutoPower IV (16x16)
MT525D	AGCO POWER	6	6.6L	140	110	AutoPower VI (24x24) or TechStar™ CVT
				140	120	AutoPower IV (16x16)
MT535D	AGCO POWER	6	6.6L	150	120	AutoPower VI (24x24) or TechStar CVT
MT545D	AGCO POWER	6	6.6L	165	130	AutoPower VI (24x24) or TechStar CVT
MT555D	AGCO POWER	6	6.6L	170	140	AutoPower VI (24x24) or TechStar CVT
MT565D	AGCO POWER	6	6.6L	180	150	AutoPower VI (24x24)
				185	150	TechStar CVT
MT575D	AGCO POWER	6	6.6L	200	165	TechStar CVT
			7.4L	200	165	AutoPower VI (24x24)
MT585D	AGCO POWER	6	7.4L	220	180	AutoPower VI (24x24)
				225	180	TechStar CVT
MT595D	AGCO POWER	6	7.4L	240	195	AutoPower VI (24x24)







—Less talk.— **MORE TORQUE.**

Even in the toughest conditions, the Challenger MT500D Series feels right at home. Because our AGCO POWER engines are engineered specifically for ag applications, we deliver unrivaled torque for powering through the most demanding conditions. Plus, our engines are designed to deliver optimal torque at a lower RPM range – maximizing productivity and fuel efficiency. And a superior torque rise ensures there's plenty of reserve for when the going gets rough. When it comes to lugging capability, our machines rise above the competition.

AGCO POWER engines are precision manufactured and balanced to the nearest gram resulting in reduced vibration and engine wear. Normally a hallmark of racing technology, you'll feel the benefits every time you're in the field. And with SCR technology, the MT500D Series delivers the best overall fluid economy in the industry with no trade-offs in power or productivity.

Our Power Management mode allows the engine and transmission to work together to maintain the most efficient setting based on engine load. Working the sweet spot of the engine equals peak performance with maximum torque and fuel efficiency.

- Single-side servicing and fluid fills simplify maintenance
- Industry-exclusive, tailor-made electronic engine management (EEM) system
- Changeable wet cylinder liners provide cooler combustion temperatures for greater efficiency
- Mid-rib supports for cylinder lines prevent distortion and cavitation
- A large, viscous drive fan operates only when needed, saving fuel and horsepower
- Power boost on models with AutoPower IV & VI

TRANSMISSIONS that move from **TOUGH JOB** to **TOUCHER JOB**

With two highly efficient, award-winning transmissions to choose from, you're sure to get the most advanced combination of performance and ease of use. Of course, you wouldn't settle for anything less.

TECHSTAR CVT

Simplicity and performance are at the heart of the TechStar CVT (Continuously Variable Transmission) – a technology pioneered by our engineers. Our CVT provides infinite ground speeds that are not dependent upon engine RPM, so you can access power reserves and speed choices normally hidden in the speed ranges between gears. Just move the control lever in the desired travel direction and select the right speed for the job. No shifting, jerking or delay in traction or power, just infinite control from creep to transport.

Two continuously variable speed ranges provide stepless field speed selections from 0-17 mph (0-28 kph) and transport speeds from 0-25 mph (0-40 kph) with the standard front axle, and 0-32 mph (0-50 kph) with the optional Opti-Ride™ front-axle suspension system.

CVT MODES OF OPERATION



Three different modes make operation effortless:

Lever Mode

Standard operating mode uses Power Direction shuttle or T-handle to adjust speed and keep transmission in proper torque range.

Pedal Mode

Allows speed adjustment with foot pedal operation to provide precise control when doing loader work, road transport or grain cart hauling.

Forager Mode

Industry-exclusive ability to control ground speed with foot pedal while maintaining constant engine RPMs. Ideal for baling and other PTO applications.





AUTOPOWER IV & VI

The proven AutoPower IV and VI transmissions offer four or six powershift ratios that can be shifted under full load within four electro-hydraulically selected ranges. That's 16 and 24 speeds in both forward and reverse without using the clutch. The AutoPower VI has the most speeds in the industry with 24 available. Therefore, your MT500D has the biggest working range to fit the requirements of any application.

AUTOPOWER MODES

- Lever Mode (Speedmatching): Standard operating mode that allows operator to toggle between Field or Road speed ranges. Moving the T-handle or Power Direction shuttle lever controls forward ground speed.
- Pedal Mode (AutoDrive): Allows the operator to control the desired ground speed with the foot pedal freeing the driver's hands for other operations such as loader work.



CABS crafted around YOU

The redesigned Challenger MT500D Series cab is perhaps the largest, quietest and most technologically evolved cab on the planet. Our roomy cab offers more headroom, automatic air conditioning and a commanding 360° Pinnacle View, as well as an unparalleled sound-pressure level and Multifunction joystick on all our package options. Settle back in the fully adjustable, air-ride swivel seat or choose the added comfort of the extra-wide seat with added cushioning. And with three cab package options to choose from, you get the ultimate in versatility, operator comfort and ease of operation – so you stay comfortable and alert from sunup to sundown.

Classic – Equipped with the AutoPower IV or VI partial power-shift transmission, Classic models are economical and full-featured, with comfortable and familiar control layouts.

Deluxe – With either TechStar CVT or AutoPower VI transmission, Deluxe models offer the ultimate in versatility and an ergonomic, seat-mounted control armrest. Short control armrest features T-handle transmission and fingertip controls for hydraulic remotes, three-point hitch, engine speed and headland, throttle and Power Management.

Premium – For the ultimate in technology, with all the bells and whistles, Premium models come with the new armrest with Multicontroller joystick, featuring thumb and fingertip controls of forward/reverse shuttling, PTO, programmable hydraulic function, engine and cruise speeds.

Available joystick controls increase your productivity with intuitive and ergonomic controls. Our Multicontroller (standard in our Premium cab) incorporates a wide variety of tractor controls including:

- Speed control (CVT/AutoPower VI)
- 3-point hitch control
- Headland management
- PTO
- Shuttle control
- Hydraulic remote (1)
- Engine speed memory

An additional Multifunction joystick for loader-equipped tractors controls hydraulic functions as well as speed/gear changes and forward/reverse shuttle controls.



Familiar layout ergonomically places T-handle transmission lever and hydraulic controls within easy reach on ride-side console alongside PTO and three-point hitch controls.



Short control armrest features T-handle transmission and fingertip controls for hydraulic remotes, three-point hitch, engine speed and headland, throttle and Power Management.



Armrest with Multicontroller and Multifunction joystick for thumb and fingertip control of forward/reverse shuttling, PTO, programmable hydraulic functions, engine and cruise speeds.



We wrote the book on **WORKING SMARTER**

We're all about smart performance – you getting exactly what you need at your fingertips, with clearly marked controls and switches that are ergonomically arranged by form and function. From the hand throttle and hydraulic controls, to the three-point hitch depth control, to the engagement switch for the power front axle, ease of use is maximized in every MT500D control system.

POWER UP TO FIT YOUR OWN SPECIFIC CHALLENGE

Tractor Management Center

The innovative Tractor Management Center (TMC) Display offers an extensive array of high-value monitoring, control and comparative functions, including wheel slip, fuel/hour, distance, cost/hour and area worked so the operator can work smarter and more efficiently. Auto-Guide™ 3000 works through this same display.

One-Touch Headland Management System™

With the push of a button, an operator can combine and record a sequence of tractor functions that can be replayed by

pressing the Headland button, for ultimate ease of use. Program up to 35 tractor and implement actions including pre-set cruise control speeds, front wheel assist, hydraulics and PTO.

EASY DATA RECALL

- Input memory functions for up to eight complete sets of tractor applications data using keys and rotary dial on the TMC Display
- Name fields, operators or implements for easy recall when changing drivers or equipment

ISOBUS-COMPATIBILITY WITH FINGERTIP CONTROL

Monitor the performance of both the tractor and trailing implements through a common ISOBUS communication system that eliminates the need for a separate monitor or control box in the cab for different implements.







How **BIG JOBS** come to an **END**

Make short work of the toughest jobs with the rear-end capabilities of the MT500D. It begins with a separate hydraulic pump dedicated only to rear remotes. This maximizes productivity by maintaining constant flow to implements like planters. There's also a three-point hitch that simplifies the process of hooking up implements with a quick hitch system. Finally, an electronically controlled PTO makes it easy to deliver serious horsepower to a variety of implements including balers, mower conditioners and manure spreaders.

POWERFUL HYDRAULICS SYSTEM

- Closed-center, pressure- and flow-compensated hydraulic system provides flow to multiple functions at up to 29 gpm (110 l/min). An optional 39 gpm (150 l/min) hydraulic pump is available for more demanding applications.
- Used primarily for loaders, an easy-to-use Multifunction joystick controls two hydraulic remotes and incorporates hydraulic functions for precise and intuitive operation. Loader work becomes a breeze using the foot pedal to control ground speed.
- TMC Display allows the operator to regulate the flow rate for lifting and lowering, adjust the actuation time and lock/unlock each remote, simply by using the touch keys and rotary dial.

SERIOUS HITCH PERFORMANCE

- Experience some of the highest lift capacities in its class – up to 14,000 lbs. – depending on the chosen transmission.

- Transport lock easily secures implements in the raised position, while the hydraulic rams absorb shocks, leaving ride and steering unaffected for improved comfort.
- Optional front three-point hitch option integrated into the tractor mainframe delivers greater strength and a more compact profile. Front linkage has standard lift capacity of 8,800 lbs.

PTO SETTINGS TO SUIT YOUR OPERATION

- Electronically controlled Economy PTO available on all models.
- Economy PTO reduces engine speed when handling light loads, yet maintains full 540- or 1,000-rpm PTO shaft speed, which helps reduce fuel usage, noise and vibration.

INCREASE YOUR YIELD

with precision technology

Today's top producers know that precision agriculture technology is critical to their success. Our Challenger tractors can be equipped with AGCO advanced technology like AgCommand® to monitor real-time machine data and optimize performance. Plus, Auto-Guide 3000 is a complete, integrated autosteering system to reduce time and input costs. Get the most out of your machines and your crops.

AGCOMMAND

AGCO's AgCommand is an industry-leading tool that allows wireless transfer of your vehicle data back to your office or mobile device. Access everything you need to optimize performance, monitor vehicle service intervals, monitor operating costs and generate easy-to-use information to drive efficiency and productivity. AgCommand's GNSS (Global Navigation Satellite System) applications tell you where your machines are and what they're doing – putting you in complete control like never before. The data is transferred to a secure Internet

site that can be viewed from your laptop, iOS phone or iOS tablet.

AUTO-GUIDE 3000

Auto-Guide 3000 is a complete, integrated autosteering system that works seamlessly with your AGCO vehicle terminal. It uses advanced satellite navigation and the TMC Display to steer the tractor, removing much of the tedium of field operations and leaving the operator free to focus their attention on optimizing settings and monitoring work more closely. This highly advanced but simple-to-use system will help you reduce input costs as well as operator fatigue. At the end of the day, significantly reduced operator fatigue equals increased accuracy and greater efficiency on the farm.

FUSE
TECHNOLOGIES





We didn't build
THE WORLD'S BEST TRACTOR
to drop the ball on support.



When you buy a Challenger tractor, you're buying more than a piece of farm equipment. You're buying the peace of mind that comes from a job well done, and a machine well built. Take a closer look at the MT500D Series at your local Challenger dealership, and you'll see that – down to the smallest detail – it's built to the highest standards.

DEALERS AND SERVICE: ABOVE AND BEYOND

For 365 days a year, day and night, under the most adverse conditions, our dealer network keeps North America's agribusiness in motion. Our dealers are second to none in on-location service. And their factory-trained technicians work as hard at preventing problems as they do repairing them. With more mobile service trucks loaded with more diagnostic equipment than most repair shops, it's little wonder the army of Challenger loyalists continues to grow. Combine this quality service with AGCO's 24-hours-a-day parts network and you get the gold standard in dealer support.

CHALLENGER FINANCING

We know financing is as much a part of your purchase decision as the features and benefits of the machine. So we offer flexible payment schedules, flexible terms, quality service, competitive rates, comprehensive financing and leasing options and virtually unlimited resources. All are available under one roof, at your authorized Challenger dealer.

MAXIMUM WARRANTY COVERAGE

As a Challenger tractor owner, you get full warranty protection for two years or 2,000 hours, whichever comes first. An Extended Service Plan is also available, assuring you of additional support from your Challenger dealer.

HIGHER RESALE VALUE

Quality equipment demands a premium price, particularly when there's no competition. Fortunately, the new MT500D Series tractors are extremely cost-competitive, considering their advanced innovation. Plus, you can be confident the technology built into these tractors, along with our long-term dealer support, will do nothing but help retain their value long into the future.

When you combine seriously evolved machinery with seriously dedicated dealers, you get long-lasting value.

MT500D Series

MT515D | MT525D | MT535D | MT545D | MT555D | MT565D | MT575D | MT585D | MT595D

MODEL	MT515D	MT525D	MT535D	MT545D	MT555D	MT565D	MT575D	MT585D	MT595D
ENGINE PERFORMANCE									
PTO hp @ 2100 Rated engine rpm	110	120 (AutoPower IV), 110 (AutoPower VI), 110 (TechStar CVT)	120	130	140	150	165	180	195
ISO engine hp @ 2100 Rated engine rpm	130	140	150	165	170	180 (AutoPower VI) 185 (TechStar CVT)	200	220 (AutoPower VI) 225 (TechStar CVT)	240 (AutoPower VI)
ENGINE									
Rated speed (rpm)					2100				
Maximum power bulge	AutoPower IV= 9.4%	AutoPower IV=9.3%, AutoPower VI=9.4%, TechStar CVT=9.4%	AutoPower VI=9.3%, TechStar CVT=9.3%	AutoPower VI=9.2%, TechStar CVT=9.1%	AutoPower VI=12.7%, TechStar CVT=12.3%	AutoPower VI=11.1%, TechStar CVT=11.2%	AutoPower VI=10.9%, TechStar CVT=10.9%	AutoPower VI=10.8%, TechStar CVT=10.8%	AutoPower VI=10.7%
Type					ACCO POWER				
Model				6.6L		AutoPower VI, 7.4L; TechStar CVT, 6.6L			7.4L
Number of cylinders					6				
Aspiration					Turbocharged and air-to-air aftercooled				
Type of cooling					Liquid cooling				
Displacement liters (CID)				6.6 (402)		6.6 (402) / 7.4 (452)			7.4 (452)
Compression ratio				17.4:1		17.4:1 / 17.8:1			17.8:1
Fuel injection system				Bosch high pressure common rail, electronic injectors with variable injection timing and duration					
Fuel				Diesel					
Fuel filter				Replaceable filter - 30μ prefilter - 5μ main filter					
Lubrication system				Gear pump at bottom of timing gear					
Oil filter				Single, spin on					
Starting aid				Thermostat					
PTO									
Speeds rpm	Classic=540/1000 Base, 540/540e/1000/1000e Optional; AutoPower VI Deluxe/Premium=540/540e/1000/1000e Base, 540/1000 Optional; TechStar CVT=540/540e/1000				Classic=540/1000 Base, 540/540e/1000 Optional; Deluxe/Premium=540/540e/1000 Base, 540/1000e/1000 Optional AutoPower VI				
CAPACITY									
Fuel tank capacity US gallon (L)		82 (310)				114 (431)			
DEF tank capacity US gallon (L)		8 (30)				14 (53)			
Hydraulic reservoir capacity gal (L)				26.4 (100)					
DIMENSIONS & WEIGHT**									
Wheelbase in. (mm)		113.1 (2874)			AutoPower VI=117.8 (2993) TechStar CVT=117.8 (2993)		AutoPower VI=117.0 (2972) TechStar CVT=117.0 (2972)		
Overall length in. (mm)		192.8 (4896)				203.6 (5171)			
Max. ht. over cab in. (mm)		117.4 (2983): add 3.3(83) for Auto-Guide 3000 TopDock			120.7 (3066): add 3.3 (83) for Auto-Guide 3000 TopDock				
Approx. ship wt lbs (kg)		15,060 (6,830)			15,800 (7,167)		15,990 (7,253)		
Max. allowed wt lbs (kg)	20,393 (9250)	AutoPower VI=20,393 (9,250); TechStar CVT=25,353 (11,500)			AutoPower VI=26,455 (12,000) TechStar CVT=27,558 (12,500)		AutoPower VI = 30,865 (14,000); TechStar CVT = 27,558 (12,500)		AutoPower VI = 30,865 (14,000)
3-POINT HITCH - REAR									
Category 3					Standard				
Max. lift capacity at link end lbs (kg)	AutoPower IV/VI=9800 lbs (4445)	AutoPower IV/VI = 9800 lbs(4445); TechStar CVT = 11500 lbs(5210)	AutoPower VI=9800 lbs (4445); TechStar CVT=11500 lbs (5210)	AutoPower VI=14000 lbs (6350); TechStar CVT=13715 lbs(6620)		AutoPower VI=14000 lbs(6350); TechStar CVT=13715 lbs(6620)			

ALL MODELS	
ELECTRICAL SYSTEM	
Battery	12V (X2)
Alternator – standard	Twin - 120 Amps (Deluxe and Premium); 175 Amps (Classic)
Alternator – optional	175 Amps (Deluxe); Twin–120 Amps (Classic)
ISOBUS Connector – optional	50 Amps
TRANSMISSION	
Type	AutoPower IV
Clutches	2
Speed range	1.35–25.6 mph (2.17–41.16 km/h) forward/reverse; Optional Creeper: .34–1.47 mph (0.54–2.37 km/h) forward/reverse; Optional Super Creeper: 0.09–1.86 mph (0.15–2.94 km/h) forward/reverse
Forward speeds	16
Cruise control speeds	2
Type	AutoPower VI
Clutches	2
Forward speeds	24
Cruise control speeds	2
Type	Power Management (PM)
Clutches	None
Field speed range	0.02–17 mph forward and 0.02–10 mph reverse (0.03–28 km/h Forward and 0.03–16 km/h reverse)
Road speed range	0.02–25 mph forward and 0.02–24 mph reverse (0.03–40 km/h Forward and 0.03–38 km/h reverse)
Road speed range options	Optional – 0.02–32 mph forward and 0.02–24 mph reverse (0.03–50 km/h forward and 0.03–38 km/h reverse)
Forward speeds	Infinite
Cruise control speeds	2
OPERATOR AREA	
Cab glass area ft ² (m ²)	61 (5.67)
Noise level dB(A)	69
Cab suspension	Classic–no susp is base, mech optional; Deluxe–Opti-Ride hydraulic is base, mech optional; Premium–Opti-Ride hydraulic is base
Air superseded seat standard	Manual adjustment on Classic, Automatic adjustment on Deluxe and Premium
Air suspended seat optional	Automatic adjustment on Classic, Superluxe seat on Deluxe and Premium
Transmission control(s)	Right console/armrest
Forward control(s)	Power direction (three function shuttle)
Cab doors (2)	Standard
Tractor management center	Standard on Deluxe and Premium; not an option on Classic
TECHNOLOGY	
AgCommand Ready	Standard
DRAWBAR	
Category 2 with drop pin	Standard
Max. vert. static load lbs (kg)	3527 (1600) - Standard Position

ALL MODELS	
BRAKES AND FINAL DRIVES	
Type of final drives	Inboard planetary
Type of brakes	Wet disc
Brake actuation	Hydraulic
Trailer brake	Optional hydraulic or pneumatic
FRONT AXLE	
2-WD	N/A
4-WD differential lock	Standard – full-locking, electro-hydraulic
4-WD engagement	Electro-hydraulic
4-WD maximum steering angle	55°
Opti-Ride front axle susp.	Standard (Deluxe and Premium; N/A on Classic models)
HYDRAULICS	
System type	Closed Center Load Sensing (CCLS); Optional Open Center on Classic MT515D-MT545D
Total flow rate - US stand. gal (L) – standard	29 (110)
Total flow rate - US stand. gal (L) – optional	39 (147) – optional on Deluxe and Premium MT555D-MT595D
Max. pressure PSI (bar)	2,900 (92)
Available flow rate per spool valves gpm (L/min)	24.3 (92)
Remotes – standard	Classic–3 mechanical; Deluxe–2 fingertip/2 mechanical; Premium–4 fingertip
Remotes – optional	Classic – mechanical; Deluxe – mechanical/electric or electric; Premium – electric
Coupler size	ISO 1/2"

** All dimensions measured with 18.4R42 rear tires and 14.9R30 front tires. AGCO Corporation has a company policy of continuous improvement; therefore, specifications are subject to change without notice.



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Challenger® is a worldwide brand of AGCO Corporation.