

*Challenger* MT600D SERIES

# *Challenger* MT600D SERIES



MT600D SERIES

205 - 290 PTO hp



Challenger

# QUITE POSSIBLY THE MOST ADVANCED ROW CROP TRACTOR EVER BUILT

We set out to build a tractor that would exceed the specific performance requirements that large-scale farming operations demand. Mission accomplished. Introducing the new Challenger MT600D Series.

The MT600D Series is purpose-built for agribusiness professionals looking for a big-time productivity edge. This tractor is your high-capacity, high-power choice for unrivaled performance day after day, season after season, year after year.

## AGCO POWER™ ENGINE

This Tier 4i-compliant engine delivers unmatched power. And coupled with our innovative SCR (selective catalytic reduction) technology you get the unbeatable combination of performance and unprecedented air quality control.

## TRUTRAK STEERING

This lets the operator easily adjust the steering ratio to require more or less turns of the steering wheel for the

same angle of turn of the front wheels. With this adjustment flexibility, you'll enjoy quicker turns with less effort.

## TECHSTAR™ CVT (CONTINUOUSLY VARIABLE TRANSMISSION) WITH POWER MANAGEMENT

When activated, the engine and stepless transmission technology work together to find the most efficient operating mode. You'll end up saving fuel, reducing engine noise and extending service life.

## TRACTOR MANAGEMENT CENTER DISPLAY AND ONE-TOUCH MANAGEMENT

The intuitive and ergonomic design puts all key functions at your fingertips increasing overall operator productivity and comfort.

## OPTIRIDE™ PLUS CAB SUSPENSION

To further reduce operator fatigue, the cab suspension system uses a hydraulic damper and accumulator on each corner of the cab to provide unrivaled ride comfort.

## PINNACLE VIEW CAB

The four-post cab design provides more interior space and fewer obstructions for exceptional visibility.





## AT THE HEART OF THE MATTER

- Wet cylinder liners and charge air cooling allow more effective cooling at the top of the cylinder, where it matters most.
- Cylinder head bolts are located in a circular pattern around the top of each cylinder for greater strength.
- Piston connecting rods are individually balanced for smoother operation and longer life.
- Latest technology in cross-flow design includes cast inlet channels and combustion chambers to ensure ideal combustion.
- Bosch electronic fuel-injection pump provides quick and precise response to throttle movements.
- Viscous fan drive houses an internal clutch which responds to engine temperature for economical, yet efficient, engine cooling.
- Mid-support of the cylinder liners reduces vibration by 75% which reduces engine noise and wear on cylinders and cylinder liners.

The unique combination of power and fuel efficiency make the AGCO POWER 8.4CTA engine an operator's dream come true.

## ADVANCED ELECTRONIC ENGINE MANAGEMENT

Enhanced efficiency begins with the sophisticated integration of Challenger's Electronic Engine Management (EEM) system with common rail fuel-injection. You'll notice an immediate and precise response to throttle inputs. Plus, constant communication with the TechStar CVT allows you to maintain desired ground speeds.

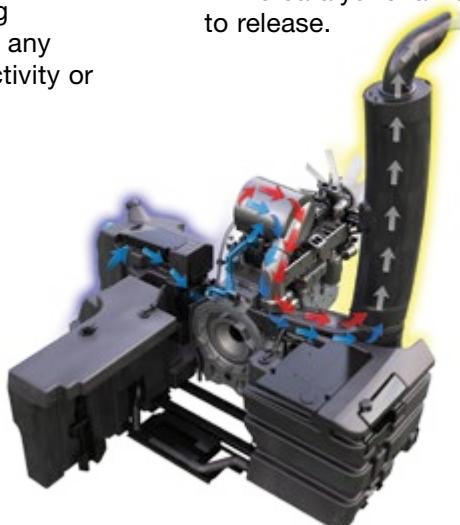
## SCR TECHNOLOGY

Now there's an emission technology that offers the most farmer-friendly approach to meeting upcoming EPA standards without making any compromises in power, productivity or operating costs.

## WITH SCR YOU ESSENTIALLY GET IT ALL.

Since this technology is a post-combustion process, you get uncompromised horsepower and torque. Plus you get:

- Tier 4i-compliant emission technology.
- Maximum fuel efficiency.
- Cool, quiet, long-lasting engines, thanks to the SCR process, coupled with electronic engine management.
- Cleaner air, because nitrogen oxides are converted into harmless nitrogen gas and water vapor in the catalyst chamber prior to release.



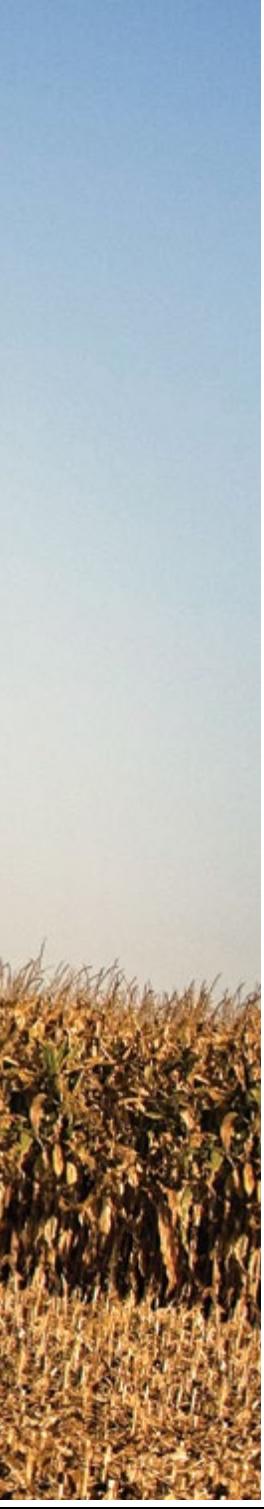
# WHERE POWER AND EFFICIENCY RESIDE



# ADVANCED TECHNOLOGY, SIMPLY APPLIED



*Challenger*



When engaged, TechStar™ CVT with Power Management automatically controls engine speed and transmission ratio for unrivaled performance and efficiency.

## A PROVEN PERFORMER

With more than 15 years of research and development and over 100,000 CVT transmissions in service worldwide, the TechStar CVT is the proven industry leader.

- The fewest number of moving parts leads to longer life, greater residual value and less downtime.
- A separate transmission oil reservoir, isolated from the hydraulic remotes, minimizes the chance of contamination from implements.
- Service-friendly design allows technicians to easily perform diagnostics with the AGCO Electronic Diagnostic Tool.
- A simple push of a button allows you to set four cruise speeds – two in each of the two ranges.
- You'll have access to speeds normally hidden between gears. No shifting, no jerks, no delay in traction – just infinite speed control from creep to transport.

## YOUR CHOICE OF OPERATING MODES

In addition to easy manual operation, you have a choice of operating modes that afford you even more flexibility.

- Pedal Mode – Go hands-free by flipping a switch on the TMC console. Engine speed and transmission ratio are adjusted to manage ground speed.
- Forager Mode – Ideal for PTO work. You can maintain a specific engine speed while using the foot pedal to control ground speed.
- Power Management Mode – When activated, the engine and transmission automatically find the most efficient settings to get the job done. The engine automatically throttles up or down when you need more or less power. It saves fuel, reduces engine noise and extends service life. Plus, you can focus on the task at hand rather than adjusting the tractor.

## THE SPEED YOU NEED

The TechStar CVT lets you set two field cruise speeds in each of the two speed ranges. Just flip the toggle switch on the SV1, or hold it down until the desired speed is indicated on the digital display. With SV2, simply hold it down until your intended speed is indicated.

You can set speeds for specific tasks. Plus, once set, you can recall the speed with the simple push of a button.

You'll also have the unique ability to couple A and B engine speed settings with the ground speed memory system. This allows you to adjust both engine speed and transmission ground speed with the SV1 and SV2 buttons.



# CONCRETE STRENGTH

High-horsepower and demanding big-farm conditions call for a stronger, tougher tractor. Day in and day out, the MT600D Series delivers with unsurpassed structural rigidity, strength and support.

## A POWERFUL FRAME

A rugged pair of chassis rails, specially contoured for tight turns, extend from the front mounting all the way to a mounting plate behind the engine. They deliver more strength and support and serve as a strong mounting plate for a front-end loader, front-mounted implements, fertilizer tanks and attachments.

## FRONT AXLE STRENGTH

Standard equipment is simply stronger and heavier. Extra-large final drives allow the axle to handle the largest draft loads and weights with ease, while at the same time providing a 55-degree steering angle for tight headland turns.

## ENHANCED RIDE COMFORT AND TRACTION

The OptiRide axle suspension enhances ride comfort and puts more power to the ground. Coupled with the OptiRide Plus cab suspension system, it can easily reduce vibration by 50% or more.

## QUICKER TURNS WITH LESS EFFORT

TruTrak fast-steering lets you adjust the steering ratio to require more or less turns of the steering wheel for the same angle of turn of the front wheels.







Challenger

# DO MORE WITH EASE

A powerful hydraulic system, a versatile PTO and a high-capacity, three-point hitch complement the massive pulling power of the MT600D Series.

## HIGH-PERFORMANCE HYDRAULICS

A closed-center, pressure- and flow-compensated hydraulic system provides flow to multiple functions at up to 46 gpm (175 lpm) and 2,900 psi (200 bar). A power-beyond circuit and a load-sensing line are also available, while a fifth and sixth spool valve are optional.

The MT600D Series tractors use five separate pumps:

- One for charging the TechStar CVT
- Two for the steering circuit (one being an emergency back up)
- One for low-pressure circuits like the diff lock, PTO engagement, etc.
- One large variable-displacement unit solely for the spool valves and three-point hitch.

## CUSTOMIZE HYDRAULIC SETTINGS

Using the touch keys and rotary dial on the TMC display, you can electronically enable or disable “float” and accurately set ram extension and retraction, flow rates and kickout timing.

## ADAPTABLE PTO SYSTEMS

PTO speed is digitally displayed on the dash for precise control of PTO-driven implements. The hydraulically actuated system allows for smooth modulation and system protection.

## ECONOMY PTO SYSTEM

This allows the engine speed to be reduced by 18.5% to 1,605 rpm in economy mode, while maintaining full 1,000 PTO shaft speed.

## LOTS OF LIFT

Standard amenities on all models include an electronic three-point hitch with a maximum lift capacity of 22,760 lbs (10,323 kg), four remote hydraulic outlets and a choice of PTO systems that sync with your operation. Options include a front three-point hitch and up to six rear remotes and two front remotes.

## SMOOTH TRANSPORT

As mounted equipment is being moved over the road or across the headland in the raised position, the Active Transport Control (ATC) hydraulic cylinders automatically absorb the shocks that negatively impact ride quality and stability.



# TOTAL COMMAND AND CONTROL

Enjoy the largest cab in its class with an amazingly low interior sound rating and a 360-degree view that's second to none.

## WORLD-CLASS COMFORT EQUALS WORLD-CLASS PRODUCTIVITY

- The MT600D AirRide seat – A smooth ride with standard adjustments that include height and suspension, fore and aft seat position, lumbar support and back tilt position.
- Deluxe seat option – The semi-active, heated VRS operator seat uses a specially tuned damping system that provides continuous real-time automatic damping force in any one of three positions, based on terrain inputs.
- OptiRide Plus cab suspension system – It uses a hydraulic damper and accumulator system on each corner of the cab to provide a first-class ride.
- Quiet cab – At just 71 decibels, this cab has a best-in-class interior sound rating.





The intuitive and ergonomic design of the Tractor Management Center (TMC) puts all key functions — including six hydraulic control valves — at your fingertips.

### ONE-TOUCH™ DOES IT ALL

With the touch of a button on the transmission controller, the One-Touch system uses the ISOBUS network to record and execute a host of repeated functions. These include changing ground speed, accelerating or decelerating the engine, raising and lowering the three-point hitch, engaging and disengaging the PTO and raising and lowering an implement.

### MULTIPLE MEMORY FUNCTIONS

You can easily input memory functions for up to eight implements so hydraulic settings, engine and ground speed presets and One-Touch sequences can be quickly recalled.

### PEAK PERFORMANCE LEVELS

Working with the spool valve management system, “trailed implement control” automatically adjusts the depth of sensor-equipped trailed implements to control excessive wheel slippage, assuring that field travel speed and engine performance are optimized.



# TECHNOLOGY AT YOUR SERVICE



Precision farming, machine control and machine management technology allow you to work smarter than ever before.

The AGCO System 150 Precision AutoSteering Technology, an industry leader in performance, is a complete automatic steering system, featuring flexible accuracy options.

## THE STRONGEST PARTNERSHIP IN THE INDUSTRY

AGCO and Topcon Positioning Systems have teamed up to usher in a new era of precision agriculture. This partnership was formed with a commitment to provide the most sophisticated and accurate satellite-guided positioning systems on the market.

### Multiple Viewing Options

The moving map display can be set to see the field in Bird's Eye, North Up or Horizon views.

### Visual Indicators

Easily identify area applied, speed, row number and satellites.

### Automatic Coverage Mapping

Features easy-to-read maps for tracking areas covered or missed, and boundary mapping for planning application and coverage.

### Convenient USB Port

Quick and simple for transferring field data and reports.



### COMPLETE STEERING SOLUTION

The AGI-3 Positioning System can be upgraded to Omnistar or RTK performance with 900 mHz radio, GSM option. The AGI-3 is also compatible with Topcon base stations, GSM and CORS networks.

Topcon's unique Paradigm G3 Triple Constellation Technology can receive GPS, Glonass and Galileo (when available) and features state-of-the-art inertial sensors and steering control with superior line acquisition and holding capabilities.

### Direct Interface Steering

- Automated steering system calibration
- Designed for a wide range of guidance-ready equipment

### THE CHALLENGER DIFFERENCE

Every AGCO System 150 comes standard with sub-meter and decimeter accuracy. Easily upgrade to centimeter accuracy with a Snap-In Module that also allows the use of Internet-based correction signals. Simply call OmniSTAR to subscribe to one of their signals (VBS, XP or HP) and start driving. Or use WAAS for a no-cost sub-meter system.



AGCO's AGCOMMAND system is a leading-edge data recording tool that helps users optimize fleet performance, monitor operating costs and generate reports.

## HOW AGCOMMAND WORKS

The AGCOMMAND system collects GNSS (Global Navigation Satellite System) satellite location and machine performance data every 60 seconds in the Standard Plus package and every 10 seconds in the Advanced package. This allows users to see where machines are, where they have been and the data collected at each interval.

## DATA COLLECTION

Machine performance data is collected from the vehicle's CAN Bus. This data is then transferred via a GPRS cellular modem. Access to the stored data is obtained by logging into a secure and easy-to-use website.

## BENEFITS OF AGCOMMAND

Utilizing this information will help managers analyze vehicle efficiency, maximize productivity and increase profitability. The Universal Installation Kit allows AGCOMMAND to be fitted to any piece of machinery in a fleet, regardless of brand.

## OPTIMUM PERFORMANCE

AGCOMMAND organizes information and develops detailed reports that track engine hours, fuel consumption, operator efficiency and field-specific machine information. By collecting and summarizing this information, the system promotes accountability to help optimize performance.

## MAINTENANCE

AGCOMMAND makes maintenance easier to plan and track. Service alerts can be set to signal maintenance intervals. Alerts can also be set to notify your dealer for faster service response time.

## GEO-FENCING AND LOGISTICS

Geo-fences, or virtual GPS boundaries, can be created to track when machines enter or exit designated areas. Tracking logistics enables the user to anticipate routine tasks like refueling. To help reduce downtime, the system plots a machine's exact position on the map so it can be quickly located.

## INTERNAL MEMORY

If a machine leaves a GPRS coverage area, the onboard module will record its location and performance data for up to 50 hours and transfer the information once the machine reenters a coverage area.

## EFFICIENCY

Managers using AGCOMMAND can monitor multiple fleets from off-site locations. Operations that have numerous locations and projects can utilize logistics to minimize downtime by having instant tractor performance data.



# SPEND MORE TIME IN THE FIELD

Easy-to-perform routine maintenance and easy-to-access daily service points put you back in the field in no time.

## LENGTHY REPLACEMENT INTERVALS

Spend more time working with replacement intervals for transmission oil and filters at every 1,200 hours and engine oil changes at 400 hours.

## LESS FUEL STOPS

The combination of a 167-gal (632L) tank and the efficient operating dynamics of the AGCO POWER engine allow for plenty of operating hours between refills. And the diesel exhaust fluid tank holds 16 gallons (60L), enough for two tanks of diesel.

## QUICK DIAGNOSTICS

Our CAN Bus technology allows a service technician to quickly isolate a problem by simply plugging in a hand-held unit that performs diagnostics and displays results in seconds.

## DEALERS WHO MAKE A DIFFERENCE

With our world-class dealer network you can rest assured that you'll be in good hands when it comes to service and support.

When you couple professional-grade equipment with the professional service and support offered by our dealers, you'll enjoy true value well into the future.





**SPECIFICATIONS**

PGS 18/19

MODELS	645D	655D	665D	675D	685D
<b>ENGINE PERFORMANCE</b>					
PTO HP @ 2,100-rated engine rpm (kW)					
ISO engine HP @ 2,100-rated engine rpm (kW)	205 (153)	225 (168)	250 (186)	275 (205)	290 (216)
Maximum ISO engine HP @ 1,950 engine rpm (kW)	240 (179)	265 (198)	290 (216)	320 (239)	340 (254)
	270 (201)	295 (220)	320 (239)	350 (261)	370 (276)
<b>ALL MODELS</b>					
<b>ENGINE</b>					
Rated speed (rpm)	2,100				
Maximum torque rise	29-38%				
Maximum power bulge	24-29 hp				
Type	AGCO POWER™				
Number of cylinders	6				
Aspiration	Turbocharged with air/air intercooler				
Displacement liters (CID)	8.4 (514)				
Compression Ratio	16.7 : 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				
Lubrification System	Gear Pump at Bottom of Timing Gear				
Oil Filter	Single, Spin On				
Starting Aid	Thermostart				
<b>ELECTRICAL SYSTEM</b>					
Battery	12V (X2)				
Alternator	240 Amps				
ISO BUS Connector	50 Amps				
<b>TRANSMISSION</b>					
Type	Techstar™ CVT with Power Management (PM) – 25 mph (40 kph)				
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 – 50 kph (optional)	Optional – 0.02 – 30 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				
<b>BRAKES AND FINAL DRIVES</b>					
Type of Final Drives	Inboard Planetary				
Type of Brakes	Wet Disc				
Brake Actuation	Hydraulic				
Pneumatic Trailer Brakes psi (bar) - Optional	94 – 116 (6.5 – 8)				
Hydraulic Trailer Brakes psi (bar) - Optional	0 – 2,175 (0 – 150)				

*Challenger*

ALL MODELS	
<b>HYDRAULICS</b>	
System type	Closed Center Load Sensing (CCLS)
Total flow rate - US standard gallon (L)	46 (175)
Maximum pressure PSI (bar)	2,900 (200)
Available flow rate per spool valves gpm (L/min)	26.4 (100)
Remotes – standard / optional	Standard – 4 fingertip spool valves; Optional – up to 6 fingertip spool valves available
Hydraulic Couplers	Decompression Couplers with Connect/Disconnect Under Pressure Function
Coupler Size	ISO 1/2"
<b>STEERING WHEEL</b>	
Steering Wheel	Tilt and Telescopic
Tru Trak	Standard
<b>REAR AXLE</b>	
4.33 x 118 in. (110 x 2999 mm) Long Axle	Standard
4.33 x 118 in. (110 x 2999 mm) Long Axle with Dual Wheel Provision	Optional
4.33 x 118 in. (110 x 2999 mm) Long Axle with Dual Wheel Provision and Spacers	Optional
4.33 x 105 in (110 x 2550 mm) Short Axle	Optional
4.33 x 105 in (110 x 2550 mm) Short Axle with Dual Wheel Provision and Spacers	Optional
Differential Lock - Full-locking, Electro-hydraulic	Standard
<b>FRONT AXLE</b>	
2-wheel drive	N/A
4-wheel drive differential lock	Full-locking, electrohydraulic standard
4-wheel drive maximum steering angle	55°
Quadlink front axle suspension	Optional
Quadlink differential lock	Full-locking, electrohydraulic
Quadlink front axle suspension	Optional
Quadlink differential lock	Full-locking, electrohydraulic
<b>THREE-POINT HITCH - REAR</b>	
Category 3	Standard
Stabilizers	Sway block
Maximum lift capacity lbs. (kg) – through full stroke	22,760 (10,323)
Quick Hitch	Standard
<b>THREE-POINT HITCH - FRONT (OPTIONAL)</b>	
Category 3	Standard
Integrated Front Hitch	Standard with front three-point Hitch
Maximum Lift Capacity At Link End lbs (kg)	11,000 (5,000)
<b>DRAWBAR</b>	
Category 3 with Drop Pin	Standard
Category 3 Heavy-Duty with Drop Pin	Optional
Category 4 with Drop Pin	Optional

ALL MODELS	
<b>PTO</b>	
Speeds - standard rpm	1,000/1,000E
Engagement	Electro-hydraulic
540E	Optional
Shaft Diameter in (mm)	1.75 in (45 mm) Shaft, 20 spline
Engine Speed if PTO at 1000 rpm / 1000E rpm / 540E rpm	1,970 / 1,605 / 1,577
<b>OPERATOR AREA</b>	
Cab Volume ft³ (m³)	116.5 (3.3)
Cab glass area ft² (m²)	67.3 (6.22)
Noise level dB(A)	71
OptiRide™ Plus hydraulic suspended cab	Standard
Operator seat - air suspension	Standard
Deluxe VRS Operator Seat	Optional
Transmission Control(s)	Right Console/Armrest
Forward Control(s)	Left-hand Control
Cab Doors (2)	Standard
TMC Display	Standard
<b>GUIDANCE SYSTEM</b>	
AGCO System 150 AutoSteering™ Precision Technology	Optional
<b>CAPACITY</b>	
Fuel tank capacity US gallon (L)	167 (630)
DEF (AdBlue) usable tank capacity US gallon (L) (optional)	16 (60)
Hydraulic Reservoir Capacity Gallon (L)	29.1 (110)
<b>DIMENSIONS &amp; WEIGHT*</b>	
Wheelbase in (mm)	122 (3,100)
Overall Length in (mm)	215.7 (5,480)
Maximum Height Over Cab in (mm)	141 (3,584)
Approx. Shipping Weight lbs (kg)	24,250 (11,000)
Max. Allowable Weight lbs (kg)	33,070 (15,000)

\* All dimensions measured with Dual 520/85R46 rear tires and 480/70R34 front tires



## AGCO FINANCE

AGCO Finance understands that financing is as much a part of your purchase decision as the features and benefits of the product. So we're committed to providing the best means of acquiring the equipment you need, while allowing you to preserve other credit lines of operating capital.

Work with your local AGCO Dealer to find the equipment and financing program that best matches your operating and cash flow needs. You can also contact AGCO Finance directly at 888-989-8525 or [AGCOfinance.com](http://AGCOfinance.com)

See your authorized Challenger dealer for:

- competitive rates
- comprehensive financing
- flexible payment schedules
- flexible terms
- quality service
- leasing options
- virtually unlimited resources

## ABOUT AGCO

AGCO, Your Agriculture Company, is a premier manufacturer of agricultural equipment, providing high-tech solutions for professional farmers feeding the world. The company is dedicated to delivering superior customer service, innovation and quality. AGCO products are distributed in more than 140 countries worldwide.

## AGCO ANSWERS

(877) 525-4384 [AGCOanswers@AGCOCorp.com](mailto:AGCOanswers@AGCOCorp.com)

At AGCO, customer care isn't just a department. It's a commitment. Contact us with your questions. We'll do our best to answer them promptly or put you in touch with someone who can.