

Challenger

MT700 SERIES | 380–431 ENGINE HP

**THE TRACK TRACTOR.
RETHOUGHT. REENGINEERED. REINVENTED.**



CHALLENGER MT700 SERIES | 380 – 431 ENGINE HP

AT A GLANCE

SUPERIOR PERFORMANCE AND INTELLIGENCE ALL COME STANDARD.

Introducing the Challenger® MT700 Series: The world's most intelligent track tractor.

The MT700 Series inherits common architecture from the Challenger 1000, the most technologically advanced tractor available today. It's engineered with all the capabilities for which Challenger is known, along with an innovative suite of on-board intelligence upgrades that boost productivity and improve decision-making for your operation. The MT700 Series has been designed with two things in mind — you, and your business.

NOT JUST ENGINEERING. ACCUENGINEERING.™

Challenger's AccuEngineering platform leverages superior design to deliver smarter, more intuitive, more efficient machinery — to help meet the growing needs of our customers. From the controls in the cab to the AccuDrive™ powertrain to the AccuTerminal™, AccuEngineering provides more efficiency, increased productivity and helps reduce costs. Experience the new standard of excellence against which all other track tractors will be measured.

Challenger MT700 SERIES | INTELLIGENT FARMING
SUNFLOWER

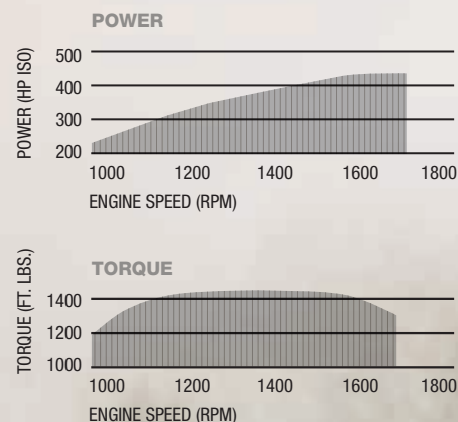
The rules of agribusiness are constantly changing. Challenger is leading the way. Today we're developing the most efficient engineering, machinery and decision-making tools that larger, more complex operations need to be more successful and more profitable — delivering better yields, invaluable insights and reduced costs.

**WE CALL IT
INTELLIGENT FARMING.**

MT700 SERIES ADVANTAGES

- Maximum torque at low RPM for unmatched pulling power and maximum fuel efficiency.
- Upgraded Mobil-trac™ system improves in-field and on-road performance.
- Proprietary MTS Maxx Ride™ integrated comfort system (ICS) for superior ride quality and operator comfort.
- Intuitive operating environment and on-board technology platform seamlessly connect operator and machine.
- Superior flotation and a high level of tractive efficiency over a wide range of soil conditions.
- Improved stability and traction on hillsides.
- The ergonomically designed seat, with integrated independent suspension, makes long days feel short.

MAXIMUM TORQUE AND OPTIMIZED POWER. ON DEMAND.



Productivity begins with the MT700 Series AccuDrive powertrain. Simply put, it maximizes engine torque at slow speeds, creating efficiencies throughout the driveline. You can pull the heaviest implements through the toughest conditions more efficiently than ever before. AccuDrive delivers higher performance, less engine noise, reduced fuel costs and extended service life. It doesn't get any more intelligent than that.



CONCENTRIC AIR SYSTEM (CAS)

A new high-performance fan located in front of the cooler unit sucks in cold, dense air and accelerates it over the concentrically formed hood and presses it through the radiator.

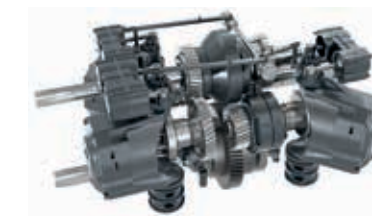
- The CAS has its own hydrostatic drive, delivering ideal cooling power to each component, according to need, independent of engine speed.
- The optional reversing fan function blows air at the grille — preventing the accumulation of ground residue.



AGCO POWER™

The highly efficient 7-cylinder engine was improved with a high-torque, low-engine-speed concept and delivers 1,400 ft./lbs. of torque at 1,275 RPM — perfect for heavy draft work.

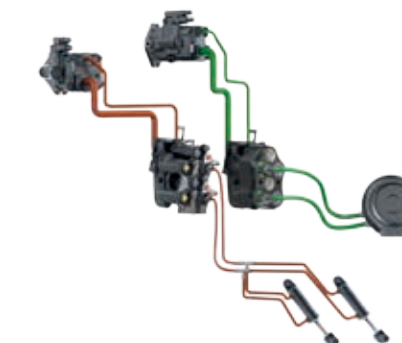
- The engine, transmission, fan and hydraulics are precisely engineered to work at their highest capacity at these low engine speeds — delivering unsurpassed performance and efficiency, 365 days a year.



ACCU-VT™ TRANSMISSION

The transmission provides optimal coordination with the engine for peak performance and productivity across multiple applications.

- During field operations, torque is transferred flexibly, resulting in tremendous pulling power.
- The continuously variable operation allows for 65 ft./hour to 25 mph all in one range without any intervention by the operator, for easier operation.



PTO AND HYDRAULICS

Challenger's MT700 Series is designed to efficiently operate countless implements, allowing you to take advantage of multiple hydraulic options.

- Whether you choose 58 GPM or 113 GPM, full flow is delivered at 1,700 RPM — delivering the perfect oil pressure and oil flow for any implement.



MORE PERFORMANCE. IN THE FIELD. ON THE ROAD.



The MT700 Series features an infinitely adjustable bar axle with smooth handbar, giving these machines the power to adapt to multiple track options.

MAXX RIDE™ ICS



MORE COMFORT AND LESS FATIGUE BEGINS WITH CHALLENGER'S MAXX RIDE INTEGRATED COMFORT SYSTEM.

Maxx Ride integrates three of the tractor's core systems to provide enhanced comfort and stability both in the field and when roading.

THE MOBIL-TRAC SYSTEM

The key to a smooth ride is where the rubber meets the road. Now Challenger's legendary Mobil-trac system has been enhanced with a longer wheelbase at 101 in. (257 cm). Unique pivoting tri-bogie midwheels keep you in constant contact with the ground — for better traction, more pulling ability, greater fuel efficiency and a smoother ride.

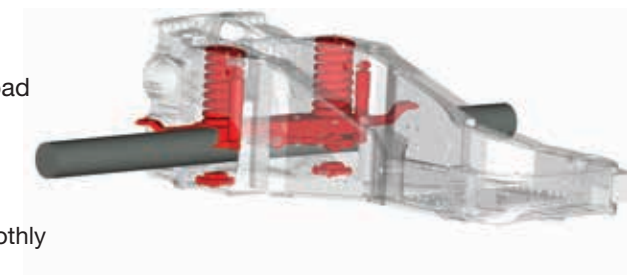
- The enhanced design of a long wheelbase and five-axle design provides improved vehicle balance while distributing the tractor weight over a greater area, in effect reducing the deep compaction that restricts plant root growth, even with the narrow 16" (41 cm) belts.
- The long wheelbase creates a lower rolling resistance and superior traction. At the same time, less fuel is required to transfer more power to the ground.
- The unique pivoting tri-bogie midwheels maintain constant ground contact over challenging terrains. The system bridges terraces and crested surfaces for unmatched traction and ride quality.



THE MTS MAXX RIDE SUSPENSION

Designed to provide optimal comfort and increased control of the machine, both in the field and on the road. The advanced design of suspending the hardbar from the chassis of the tractor using dual coil springs and off-road style heavy-duty shockabsorbers allows for increased oscillation of the hardbar.

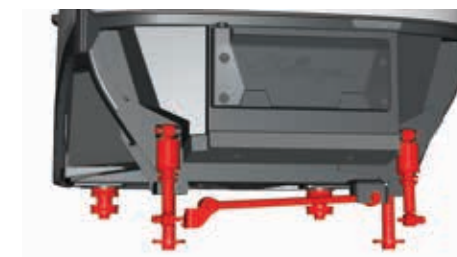
- The increased oscillation and vertical rise of the hardbar allows either of the idlers to travel 7 in. (177 mm) upward and 3 in. (76 mm) downward.
- The left and right undercarriages move up and down independently from the tractor chassis, allowing each side of the undercarriage to smoothly travel over the field and minimize compaction.



THE TWO-POINT CAB SUSPENSION

The cab suspension consists of two rugged coil-over shock absorbers. These provide a significant comfort advantage to the operator in reducing ground vibrations that would typically be transmitted by the rear axle during rough roading or field conditions.

- This innovative suspension allows for a full 4 in. (100 mm) of travel at the rear of the cab. This absorbs and dissipates jarring ground vibrations you would encounter with standard or quad-track systems.





REDEFINING THE OPERATOR EXPERIENCE.

We're not saying you'll want to work 12-hour days. But you could. The MT700 Series features a number of enhancements operators are certain to welcome — features designed to make work seem a lot less like work. It all starts with the roomy, easy-to-enter cab.

Once you settle in the ultra-comfortable operator's seat you'll notice nearly unobstructed views and sight lines. You'll be visually and physically connected to all the on-board operating systems and controls. We don't want to say we've thought of everything. But, yeah, we've thought of everything.



Help lessen operator fatigue with the optional deluxe vibration reduction system (VRS) vented leather seat with semi-active suspension.

ALL THE BELLS. AND EVEN MORE WHISTLES.

You're surrounded with storage options, soft-touch surfaces and recessed roller shades — front and rear, left and right. In addition, you'll find:

- AM/FM weather band radio with Bluetooth® / USB and an integrated Bluetooth microphone.
- Standard radio controls on the steering wheel operate with our Bluetooth-compatible, factory-fitted, heavy-duty radio.
- Five USB smart-charge ports, plus five power sockets
- Four beverage holders to keep you well-hydrated during a long day.
- The advanced ventilation system keeps you cool when it's hot, and warm when it's cold.





TRACTOR MANAGEMENT CENTER

THE CHALLENGER ACCUTERMINAL CAN BE OPERATED IN TWO WAYS:

- 1 As a touchscreen, which allows you to scroll through the menu, make adjustments and access information without having to navigate through numerous terminal pages.
- 2 Or, use the keys and rotary control to navigate through menus and data without even removing your gloves.

FULL FUNCTIONALITY AT YOUR FINGERTIPS.

As precise and high-tech as the MT700 Series may be, achieving top performance has never been so easy. Step into the cab, slip behind the wheel and you'll immediately see how the ergonomic design makes the operator's life easier and more streamlined than ever before.

THE TRACTOR MANAGEMENT CENTER PUTS EVERYTHING IN EASY REACH.

The intuitive design puts all tasks and functions at your fingertips, saving time and helping to eliminate distraction and fatigue.

- Advantage joystick
- Multifunction keypad
- Hydraulic fingertip valves
- PTO controls
- Hydraulic cross-gate lever

THE ACCUTERMINAL DELIVERS NEW LEVELS OF CONTROL

The Challenger AccuTerminal™ brings you even more precision and productivity. The intuitive touch-screen terminal lets you:

- Manage all tractor settings and adjustments.
- Monitor and control ISOBUS 11783-compatible implements.
- Integrate two camera connections to give you a complete view.
- Precisely manage variable application and avoid overlapping with the fully-automated, 36-section AgControl®.
- Move data wirelessly, in near-real-time, with TaskDoc® Pro.
- Enjoy exact tracking with the Auto-Guide™ guidance system.

COLOR-COORDINATED FUNCTIONAL AREA CONTROLS MAKE OPERATION EASY.

- **Engine and transmission** Joystick movement for increased speed and rapid reverse, throttle, foot-pedal switch to transfer ground speed control to the foot pedal, two cruise control settings, four acceleration rates and TMS/maximum output control.
- **Hydraulics** Hydraulic spool valve switches and cross gate control, rear three-point hitch controls, left rear fender control for three-point lift and spool valve control.
- **PTO** Speed selection, automatic function and activation.
- **Electronic** Auto-Guide, AccuField Command™



10.4 in. ACCUTERMINAL TECHNOLOGY FEATURES	
Implement memory	15 memory spaces
AccuField Command	22 steps
ISOBUS implement control	Std. control via multifunction joystick & terminal
Camera ports	2
Number of applications viewed at a time	1, 2, 3 or 4
Viewing options	Quarter, half or full screen
Number of languages	26
TaskDoc	Std.
TaskDoc Pro	Std.
Auto-Guide ready	Std.
Auto-Guide	Opt.
Internal memory	4 GB
USB power supply jack	1
AccuSteer	Std.
Section control	Opt.

ACCUTERMINAL



AGCONTROL Maximize the results from each management zone within your fields while reducing clutter in the cab. As part of the fully-integrated AccuTerminal, AgControl is the most accurate and responsive rate- and section-control functionality on the market, enabling precise placement of inputs, while minimizing waste and maximizing your profits.

- Fully-automatic section control via GPS through the 10.4 in. AccuTerminal for up to 24 sections on ISOBUS 11783-capable sprayers, planters and seed drills.
- ISOBUS implement control is fully integrated into the 10.4 in. AccuTerminal.
- Implement is controlled with the single terminal and joystick; no additional terminal is required.



AUTO-GUIDE With the Challenger Auto-Guide guidance system, you can ensure your fleet performs at optimum levels by virtually eliminating gaps and overlaps, while increasing your area coverage. Auto-Guide allows a more efficient utilization of expensive farm inputs, reducing overall cost by as much as 10%. Choose a GNSS, NovAtel® or Trimble® receiver. NTRIP can be used with both NovAtel and Trimble receivers. Even without a correction signal, Auto-Guide works reliably for up to 20 minutes with RTK accuracy, using Trimble xFill® technology.

- Sub-meter to centimeter accuracy minimizes overlap and skips.
- The same accuracy while working in foggy and dusty conditions, day or night.
- Reduces operator fatigue.
- Complete jobs faster with greater precision.
- View in full-screen mode in the AccuTerminal and control without changing screens.
- QuickJump function allows operators to multitask to other operating interfaces in the cab .



ACCUFIELD COMMAND AccuField Command headland management is fully integrated in the AccuTerminal and clearly laid out in the display.

- Activate automated operating sequences at headlands with the touch of a button.
- Store up to 25 implement memories.
- Create and save operating sequences for turns — while driving or standing still.
- Manage and view settings for engine and transmission control, hydraulic valves, front and rear linkage, rear PTO and the automated steering system, as well as their individual functions.
- Save settings under a unique name and call them up later.
- Easily reload and adjust settings, if necessary, or combine the new fully-automatic AccuField Command Pro with Auto-Guide to automatically start sequences via GNSS at a headland.

HYDRAULICS

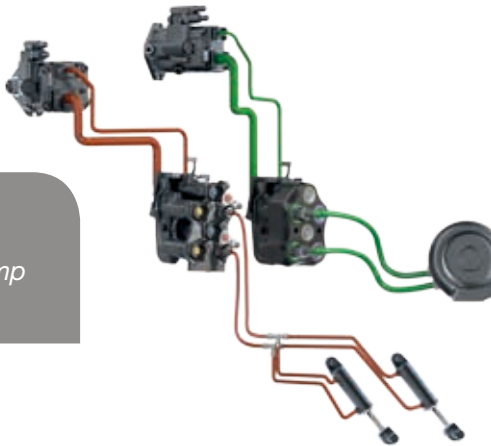
PERFORMANCE ON DEMAND, WHENEVER YOU NEED IT.

Today, you want more powerful, more versatile equipment that will do more jobs than ever. The Challenger MT700 Series has been designed to efficiently operate countless implements, giving you multiple hydraulic options. And the unique two-pump, load-sensing hydraulic system can control a delivery rate for operations that require high-capacity hydraulics.

- Two load-sensing pumps provide independent priority functions and supply each consumer with just the right amount of oil pressure and volume through each individual circuit.

FOR EXAMPLE A fan on a planter requires high flow rates with low oil pressure. Other functions such as a down pressure system, require low flow with high oil pressure. With the two-pump system, each pump delivers only the oil and pressures needed, all at low engine speeds.

- With the two-pump system, each pump delivers only the oil needed. It does this at a reduced RPM to save fuel and be more efficient.
- Since fluid isn't continuously being pumped, engine power isn't wasted moving unused fluid, excess heat isn't created and overall tractor efficiency improves.
- The dual pump system can achieve 68 GPM at 1,000 RPM or 113 GPM at 1,700 so the optimal flow is available on demand.



A BETTER-CONNECTED AGRIBUSINESS IS A MORE PRODUCTIVE AGRIBUSINESS.

Data and connectivity are powerful tools. But, you should never feel like they’re holding you hostage. Fuse®, AGCO’s next-generation approach to precision agriculture, offers advanced technology solutions to support the entire crop cycle. From planning, field prep and planting through crop care, harvesting and grain storage, Fuse Technologies and Fuse Connected Services help you connect your farm assets. They provide the support to help you manage farm data, make more informed business decisions and reduce input costs.

SEAMLESS. FINALLY.

You or your agronomist can send files directly to the machine, without a complicated 10-step process. A growing list of farm management information software (FMIS) can link directly to your machine. One simple click sends or receives files.

GO. GO. GO.

Downtime is like burning cash. Avoid it with AgCommand®* telemetry, our industry-first satellite and dual-band cellular technology that connects you, your machine and your dealer, if you wish. Monitor near-real-time performance, stay on top of maintenance intervals and even predict trouble before it stops you.

ALWAYS SIMPLIFYING.

Fuse Technologies is always working to simplify your world, with tools like the online Wayline Converter Tool and an expanding list of industry connections.



YOUR LINK TO OPTIMIZATION AND UPTIME Too busy to monitor everything yourself? Fuse and your Challenger dealer have your back. Fuse Connected Services lets you receive equipment and operational support from your AGCO® dealer. Through a combination of technology products and dealer services, you can improve efficiency, increase productivity and optimize farming operations throughout the crop cycle. Services include off-season inspections, preventative maintenance, condition monitoring, training and year-round support.

THE FUSE CONTACT CENTER provides real-time support for product set-up, operation and calibration. Call AGCO Answers: (877) 525-4384.

* AgCommand is a 24-hour service, running continuously. It is available in one-, two- or three-year subscription plans. Contact your dealer for service renewal. Important: Your data is your property, protected by your password. Use care when sharing your password.

MT700 SERIES SPECIFICATIONS*

MODELS		MT738	MT740	MT743
ENGINE				
Model		AGCO Power 9.8 L Tier 3B 7-cylinder diesel engine		
Constant power ECE R 120 at 1,700 RPM (HP ISO)	PS (kW)	380 (279)	405 (298)	431 (317)
Displacement	in. ³ (L)	598 (9.8)		
Max. torque	RPM	1,450		
Diesel tank capacity	gal. (L)	180 (681) In base, auxillary tanks options 215 (814) or 257 (973)		
DEF capacity	gal. (L)	21 (79.5)		
TRANSMISSION & PTO				
Type / model		Accu-VT Stepless / TA 300T		
Speed range forward / reverse		65 ft./hr. to 25 mph / (20 m/hr. to 40 km/hr.), 0.01 to 8.7 mph / (0.02 to 14 km/hr.)		
Max speed @ ERPM	mph (km/h)	25 mph (40 km/hr.) at 1550 ERPM		
GAUGE OPTIONS				
Type		Infinitely adjustable bar axle with smooth hardbar		
Standard / wide	in. (mm)	72 – 88 (1,829 – 2,235) / 72 – 120 (1,829 – 3,048)		
MOBIL-TRAC™ SYSTEM (MTS) UNDERCARRIAGE				
Hardbar suspension		Coiled springs (2)		
Hardbar oscillation		±11 Degrees		
Undercarriage suspension		Tri-bogie suspension		
HYDRAULICS				
Type		Electrohydraulic powerlift control (EPC) with shock-load stabilizing and standard load compensation		
Hydraulic pump capacity @ 1700 RPM	GPM (l/min.)	1 pump: 58 / 220 2 pumps: 116 / 439 (58 / 220 + 58 / 220)		
Hydraulic control valves		4 (STD), 6 (OPT)		
TRACK OPTIONS				
General ag tracks	in. (mm)	16, 18, 20, 25, 30 & 34 / (405, 455, 508, 635, 762, 864)		
Extreme ag tracks	in. (mm)	25, 30 & 34 / (635, 762, 864)		
Extreme application tracks	in. (mm)	16, 18, 20, 25, 30 / (405, 455, 508, 635, 762)		
3-POINT HITCH / DRAWBAR				
ASAE hitch category		Category 3/4N		
ASAE hitch category	lbs. (kg.)	19,000 (8,618)		
WEIGHTS & DIMENSIONS				
Unladen weight (does not include any ballast weights)	lbs. (kg.)	33,443 (15,169) standard gauge / 33,667 (15,271) wide gauge		
Max. ballast overall weight	lbs. (kg.)	41,000 (18,600)		

*Specifications are manufacturer's estimates at time of publication and are subject to change without prior notification.

Challenger



Every effort has been made to ensure that the information contained in this publication is as accurate and current as possible. However, inaccuracies, errors or omissions may occur and details of the specifications may be changed at any time without notice. Therefore, all specifications should be confirmed with your Challenger Dealer or Distributor prior to any purchase.

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