Challenger® MT600B

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We're up to
The Challenge

MT600B SERIES
180 to 240 PTO HP

Serious Machinery
built for serious producers

No one has to tell you how much farming has changed in the past few decades... or even the past few years. These days, you need a tractor that does far more than simply pull the load.

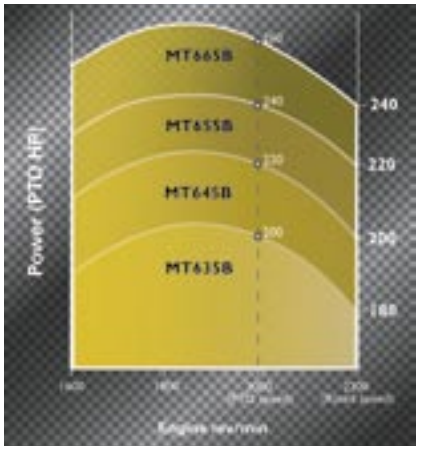
In the quest to farm more efficiently, professional and commercial producers insist on a high-quality tractor that performs without traditional limits; helps make decisions; gathers field and crop information, and executes numerous tasks with a single command—all while blending the best the industry has to offer in performance and economy.

Designed by utilizing producer input and rigorous testing by farmers like you, the Challenger® MT600B Series is exactly that tractor.

Introducing The Challenger MT600B Series

As the second generation of Challenger high-horsepower wheeled tractors, the MT600B Series has been redesigned with more power, greater efficiency and the most innovative technology in the industry.

- New Engines. All four models feature new Tier II Challenger "Endurance" engines. Built specifically for the MT600B Series, they live up to their name in terms of both power and longevity.
- Greater Cab Comfort. A VRS® semi-active operator's seat is just the beginning. You'll also appreciate new cab suspension, ergonomic controls and a class-leading 71 db(A) sound level.
- New Transmission. The Challenger TechStar™ CVT (continuously variable transmission) is standard so you can fully exploit the power and efficiency of the Challenger "Endurance" engine.



- More Horsepower. Up to 12 percent more horsepower puts the MT600B Series at new horsepower levels for greater power to the ground:
  - MT635B - 180 PTO Horsepower
  - MT645B - 200 PTO Horsepower
  - MT655B - 220 PTO Horsepower
  - MT665B - 240 PTO Horsepower
- New Power Performance Display. Packed with innovative software, it provides unsurpassed levels of tractor control with unprecedented features, including a headland management system, electronic spool valve control and implement/driver/field memory.



- Advanced Options. Add the features you need for even greater efficiency. New options include xenon lighting, pneumatic cab suspension, automatic climate control and telescoping mirrors with electric adjustment and electric de-icing.

Challenger Merges The Best Of Both Worlds

Seldom does a farm equipment company grow to prominence as quickly as Challenger. In just a few short years, the name has become synonymous with quality and service, particularly among professional and commercial producers whose output represents 75 percent of the world's commodity production. No wonder Challenger is the fastest-growing equipment brand in North America.

It all started in March 2002, when AGCO Corporation acquired the highly respected Challenger line of track tractors from Caterpillar and began expanding it into a full line of serious farm machinery.

Today, the Challenger brand includes a rugged line of wheel tractors from 18 to 240 PTO HP; a high-quality family of hay equipment, and two of the most reliable and productive combines available anywhere. Of course, we continue to offer the most innovative and advanced track tractors in the world - all built to the toughest standards in the industry.

But we haven't stopped there. We've partnered with Caterpillar - who had been building and servicing track tractors since 1987 - and Cat's dealer organization, to develop the highest level of customer satisfaction in the world. Nobody commands more respect for their integrity, in-field service and parts support than the Cat dealer network.

Quality products backed by impeccable dealer support - that's what it's all about in today's farming environment. And that's what Challenger delivers... now and into the future.





We're up to
The Challenge



"With our hilly terrain, we need a tractor with automatic shifting and plenty of torque backup so we can pull the hills without lugging down."

PERFORMANCE

New Challenger "Endurance" engines join the family



It takes a special engine for a tractor like the MT600B. So we decided to build our own. Introducing the 7.4 liter (451 cu. in.) and 8.4 liter (512 cu. in.) Challenger "Endurance" diesel engines with Electronic Engine Management (EEM).

Both Tier II compliant, six-cylinder engines boast unique features that provide up to 12 percent more PTO horsepower than the previous MT600 models, and up to 40 percent torque backup. Four valves per cylinder, along with a turbocharger and aftercooler on both models further add to the exceptional power and efficiency across a wide range of applications.

Built With Pride And Experience

Challenger MT600B "Endurance" engines are built exclusively for Challenger by Sisu Diesel, a wholly owned division of AGCO Corporation. As specialists in the development and production of rugged agricultural equipment engines, Sisu has more than 50 years of experience in off-road applications alone.

Don't think the "Endurance" models are just another off-the-shelf powerplant, though. These new Challenger engines were designed with the help of Challenger engineers to provide the highest level of performance and reliability when coupled with the TechStar CVT in the redesigned MT600B models.

If that isn't enough quality assurance, consider the fact that each Challenger engine is assembled by one person, whose name is recorded on the serial number plate!

Simply put, the "Endurance" name says it all!

Electronic Engine Management

The Challenger Electronic Engine Management (EEM) system works in perfect unity with the Bosch electronic fuel injector pump to provide quick and precise response to throttle movement. The EEM system is also in constant communication with the TechStar™ CVT, providing the ability to maintain a consistent ground speed, regardless of engine speed or vice versa.

Finally, EEM input allows the operator to program or recall two specific engine speeds with the touch of a button. You might set one, for example, at rated engine speed for chopping silage, while the second is set at idle. Either way, engine speeds can be adjusted in increments of 10 rpm independent of hand throttle position.



A pair of switches on the right-hand console permit the operator to pre-set two engine speeds. The +/- switch is used to pre-set the speeds, while the A/B switch is used to recall the settings.



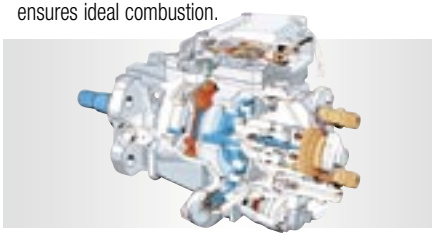
Torque backup on Challenger "Endurance" engines is more than adequate to pull you through those tough spots in the field.

The Highest Standards Of Strength And Performance

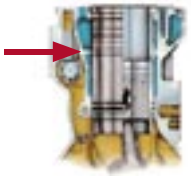
- Wet cylinder liners and charge air cooling allow more effective cooling at the top of the cylinder, where it matters most.
- Both engines feature four valves per cylinder for more power and greater fuel economy.
- Cylinder head bolts are located in a circular pattern around the top of each cylinder for greater strength.



- Piston connecting rods are individually balanced for smoother operation and longer life.
- The latest technology in cross-flow design, which includes cast inlet channels and combustion chambers, ensures ideal combustion.



- A Bosch VP44 electronic fuel injection pump provides quick and precise response to throttle movements.
- The single-piece, cast-iron block provides maximum strength and serves as a load-bearing frame component, contributing to a shorter turning radius.
- A 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 percent, which, in turn, reduces engine noise and wear on the cylinders and cylinder liners.





"They say that traveling just 1 mph too fast or too slow with my sprayer can result in an error of 5 to 8 gallons per acre. So I could really use a tractor that can maintain the ideal ground speed, regardless of engine and PTO speeds."

Challenger introduces

the new benchmark in transmission technology

Think a powershift transmission is the answer in high-horsepower convenience and efficiency? Think again! Challenger MT600B Series tractors take performance to a totally new level by including the industry-leading TechStar CVT (continuously variable transmission) as standard equipment.

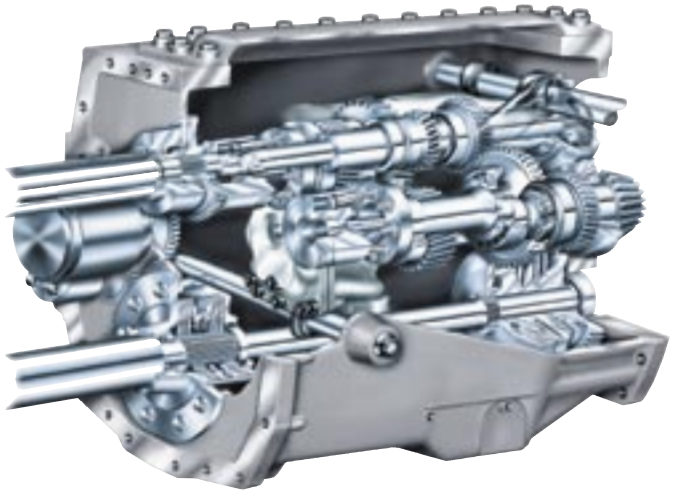
Through the combination of proven hydrostatic transmission technology with conventional mechanical efficiency, the TechStar CVT provides the operator with an unsurpassed level of economy and productivity through stepless transmission technology.

Extensive Experience Coupled With Proven Technology

Invented and perfected by a Challenger sister brand, the TechStar CVT is backed by more than 10 years of research, development and production. Today, that brand has more than 40,000 CVT transmissions in service worldwide.

You may see imitations, but there's not another transmission in existence that rivals the simplicity and performance of the TechStar CVT.

- TechStar CVT has the fewest number of moving parts of any stepless or powershift transmission in the industry. This translates into longer life, greater resale value and less potential for downtime.



- Vitally important, the TechStar CVT uses a separate oil reservoir for the transmission. This isolates the transmission from the hydraulic remotes, minimizing the chance for contamination.
- Thanks to the TechStar CVT service-friendly design, Cat service technicians can perform pressure and diagnostic tests without disassembling or splitting the tractor.



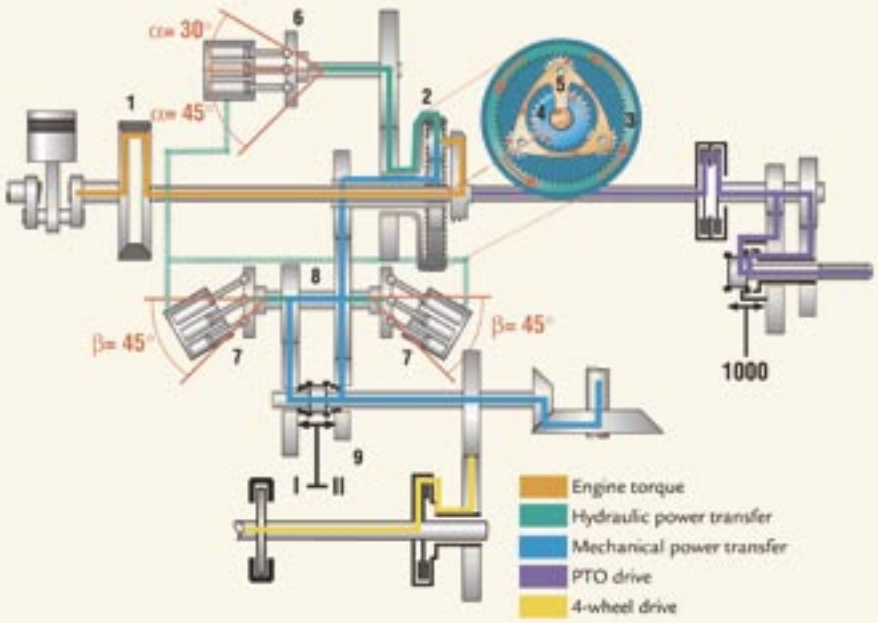
- The TechStar CVT provides the operator with the ability to set two field cruise speeds in each of the two ranges. The ability to change speeds with the push of a button improves efficiency and frees you to concentrate on other functions.



FICIENT

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The Challenge

Stepless Speed Control...



HOW IT WORKS

By using both its mechanical and hydrostatic capabilities at the same time, the TechStar CVT not only operates more efficiently, but it does so without preset gear limits.

With stepless variable speed, you have access to the power reserves, as well as the speed choices, normally hidden in the areas between gears.

Say, for example, you choose to pull a 30' chisel at 6.4 mph instead of the 5.7 mph gear limit on a competitive powershift. The difference in speed adds up to an extra 36 acres in a 14-hour day. And that's just one operation on one day.

Think of the possibilities with applications like crop spraying, where a constant ground speed is critical for accuracy. Or harvesting with PTO-drive equipment, where it's important to keep engine speed at a steady level.

With the Challenger MT600B and the TechStar CVT, the operator can control precise ground speed, engine speed and/or PTO speed as each takes precedence.

VERSATILE



Innovative controls
boost efficiency and productivity

Proven performance is yours to command with the Challenger TechStar CVT. Take control of ground speed with either hand, leaving the other free to perform other functions. Or shift to “Pedal Mode”, leaving both hands free. As the pedal is depressed, both the engine speed and the transmission ratio are adjusted to increase ground speed. In principle, it’s like driving a car with an automatic transmission.

Two Speed Ranges

Two continually variable speed ranges provide stepless field speed selections from 0 to 17 mph (0-28 kph) and transport speeds from 0 to 25 mph (0-40 kph).

To start, simply move the three-function power control lever, located on the steering column, in the desired direction of travel (forward or reverse). Then select the desired speed by pushing on the speed control lever on the seat-mounted console. The longer you hold the spring-loaded lever in the forward position, the faster you accelerate. No powershift transmission can offer near this level of variable speed control.

There’s no gear shifting, no jerks and no delay in traction or power. Just infinite speed control from creep to transport speed.

Two infinitely variable speed ranges cover all field and transport application needs from 60 ft./hour to 25 mph.











Pre-Set Speed Controls

The TechStar CVT provides the operator with, not one, but two field cruise speeds in each of the two speed ranges. Simply turn the "SV1" or "SV2" rotary dials until the desired speeds are indicated on the digital display on the instrument panel.

You may choose to set one speed for precise planting speed, while the other is set to a slower speed for headland turns. Once set, it takes only the push of a button to recall the speed.

As an added benefit, the system has the unique ability to couple A and B engine speed settings (see page 8) with the ground speed memory system. When activated, this feature allows the operator to alter both the engine speed and the transmission ground speed with the SV1 and SV2 buttons. It also simplifies multitask operations at the end of the field or in transport applications.

Three-Function Power and Shuttle Control



If you prefer left-hand speed control, the power control lever operates in a similar manner as the speed control lever. The longer the lever is held in the "forward" or "reverse" position, the faster the speed.

To shuttle between forward and reverse, simply move the lever, without clutching, in the desired direction. You can even pre-set forward and reverse acceleration speeds.

A Choice Of Operating Modes

In many situations, you may choose to control ground speed yourself via the shuttle control or the speed control lever. However, in certain applications, you may prefer to let TechStar CVT's intelligent system assist in decisions - it even includes three different operating modes.

Yet, in spite of the advanced features, the TechStar CVT is surprisingly simple to operate, regardless of the load or application.



Power Mode: the Power Mode provides stepless characteristics while putting the priority on engine speed and power. This allows you to handle the heavy loads of tillage or hauling over varying terrain without engine lug-down concerns.



Economy Mode: when operating in Economy Mode, ratio changes are made at lower engine speeds, providing the operator with improved economy in light-duty applications.



Forager Mode: the Forager Mode allows the operator to maintain a specified engine speed, while using the foot pedal to control ground speed. This feature is ideal in applications like loader work or forage harvesting, which require a constant engine speed to maintain hydraulic flow or a set PTO speed.



Engine Supervisor

Don't worry about lugging the engine, regardless of the operating mode. The unique TechStar CVT Engine Supervisor puts you in control of the performance ratios and automatically takes the reins.

Working in conjunction with the TechStar CVT, the Engine Supervisor automatically adjusts the transmission ratio anytime engine speed is reduced by the amount preselected via a rotary knob—up to 40 percent. Once the engine has recovered (lighter soil, reduced PTO load or downward slope), the tractor speed returns to the initial setting.

Time, fuel and power to the ground are automatically managed, while you concentrate on the field and equipment.



Your corporate office - in the field

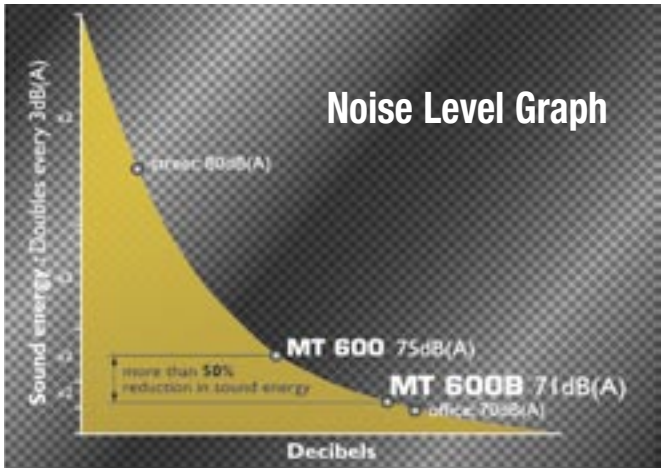
When you seriously treat farming as the profession it is, you need an office environment that's designed for the purpose. That's exactly what the MT600B Series provides. Designed by ergonomic specialists, with the help of farmers like you, the new MT600B cab offers superior comfort, control and ease of use.

Two Levels Of Cab Suspension

Comfort in the all new MT600B cab actually starts beneath your feet. Rubber roller mounts at the front of the cab isolate the cab structure from the frame to reduce the amount of vibration felt by the operator.

Or add "dual stage" pneumatic suspension as an option. Similar to the systems used on highway trucks, it adds two electronically controlled air baffles at the rear of the cab to further isolate the cab and reduce noise. You can even adjust the ride firmness on the go to one of two comfort settings.





Defy The Power Of Gravity

You've never seen anything like the computer-driven VRS® semi-active operator's seat on the MT600B Series. Nor will you experience anything like it in the field. Backed by innovative computer technology, it utilizes a specially tuned Motion Master™ damper system that allows for continuous real-time automatic damping force adjustments based on terrain inputs.

As often as 500 times per second, a computer senses changes in surface and ride conditions. In response, the program sends an electric pulse to the Motion Master damper, which contains a special fluid that changes viscosity when exposed to a magnetic field. By varying the strength of the magnetic field, the fluid viscosity can be changed from that of a light oil to that of toothpaste – continually adjusting the ride firmness to match field terrain and operator preference.

Adaptable to any size operator, the VRS system also includes adjustments for:

- Operator height and weight
- Fore and aft seat position
- Lumbar support
- Seat back tilt position (110° range)
- Horizontal isolation (2" travel)
- Swivel control

Exceptionally Quiet & Comfortable

You won't find a quieter tractor cab in the industry. At 71 db(A), the MT600B Series cab offers a level of solace that is matched only by the recently introduced MT500B.

You won't be too hot or too cold, either, thanks to the responsive climate control system that features easy-to-access controls for temperature and fan speed.

Or choose the Automatic Climate Control system, which automatically adjusts the fan and temperature controls to maintain a specified temperature.

Office Amenities Throughout

An amazing ride is just the beginning of the comfort features you'll find in the MT600B Series' spacious cab. Take a seat and look around at some of the other amenities:

- Ergonomically designed right-hand control console with controls organized by function.
- 61-square-feet of glass for excellent visibility.
- Redesigned dash with a slim profile for improved forward ground visibility and both analog and LCD displays.
- Tilt and telescopic steering column.
- Larger field cooler and field office, along with a cell phone holder and outlet.
- New cab roof design provides more headroom and better forward visibility, while putting radio access and climate control within easy reach.



"It seems that my concentration and attention to detail suffers in direct proportion to my discomfort during long days in the field. That's why cab and seat comfort are so vitally important."

COMFORT








CONVENIENCE

INTELLIGENCE

Instrument panel and side console features:

- Left-hand TechStar shuttle control with Parklock
- Indicator and information lights
- Analog gauges for coolant temperature, fuel level and tachometer
- LCD display and toggle button for engine rpm, PTO rpm, engine hours, transmission hours or ground speed
- TechStar CVT speed memory controls
- Engine supervisor control
- Engine hand throttle
- Headland management system activation
- SV1 and SV2 activation buttons
- Hydraulic unlock button
- Fingertip hydraulic remote controls
- 3-point hitch depth control
- 3-point hitch raise/lower switch
- PTO controls
- Optional 5th and 6th hydraulic remote levers
- Electronic 3-point hitch controls
- Differential lock control
- Powered front axle (PFA) control
- Optional cab suspension setting



Challenger puts control & information - at your fingertips



There may be up to 240 PTO horsepower under the hood, but control of a Challenger MT600B Series tractor is as simple as exercising your fingers. You'll find all vital functions within easy reach. Most, including all that are frequently used, are even incorporated into the armrest console that moves with the seat.

You'll also notice that information displays - including the new Power Performance III monitor mounted on the console and the LCD displays on the instrument console - are mounted in your line of sight, so you can keep an eye on both the field and the data.

Harness The Power Of Power Performance III



Leash the technology of the original Power Performance system and then some with the new-generation Power Performance III Display. Working in conjunction with the standard-equipment ground radar, it offers more than 20 valuable monitoring, control and comparative functions, including wheel slip, fuel/hour, distance, cost/hour, area worked, etc.

Power Performance III also includes the ProMAX™ Implement Response Control System and Trailed Implement Control, which provide automatic wheel slippage monitoring to control both 3-point hitch and drawbar-mounted equipment.

But that's just the beginning! Power Performance III features even more industry-leading capabilities, including individual control of up to six remotes; a state-of-the-art headland management system, and up to six sets of memory functions.

The Future In Headland Management

Headland management can be a handful with some tractors... literally. In contrast, the MT600B Series lets you memorize up to 21 tractor and implement actions for activation at the simple and carefree push of a button. Program hydraulic remotes to extend or retract; raise the 3-point hitch; downshift/upshift and/or throttle up/back; disengage or re-engage the PTO; disengage the AWD and differential lock... or any combination of the above. The choice is yours.

Unlike other systems, the Power Performance III system even allows you to pre-program a sequence before going to the field for use by an employee or family member. And don't worry if you have to leave the seat or shift into park and shut off the engine. Your Challenger tractor won't "forget."





Download And Store The Details

Using keys and rotary dial on the Power Performance III terminal, the operator can input memory functions for up to six complete sets of data. Settings can even be stored and given a name for various fields, operators or implements, making them easy to recall when changing drivers or equipment. The Power Performance III even allows you to download information to a small memory card so it can be stored or input into your office computer to create field and work rate records.

Trailed Implement Control

One of the newest benchmarks of the Power Performance III system is the ability to monitor ground speed and wheel slippage with trailed implements. Working in conjunction with the spool valve management system, this unique feature automatically adjusts the working depth of sensor-equipped trailed implements to control excessive wheel slippage. As a result, field travel speed and engine performance always remain at peak levels.

FIELDSTAR®

Fieldstar® Ready

Take field data to the next level with the Fieldstar Precision Agriculture System. Featuring the exclusive DataTOUCH® command center terminal, this user-friendly system provides access to all the functions of your in-cab system with one easy to read touchscreen.

Working in tandem with GPS technology, Fieldstar creates yield maps, application maps and marker maps, and assists with application planning, all while offering the ability to completely tailor your farming practices to your fields.

MT600B Series tractors are already built for integrated attachment of the DataTOUCH terminal. Fieldstar can also be used with all your Challenger equipment and is compatible with most agricultural software applications for a wide range of analysis options.

Power to move the load
quickly and efficiently

Whether you push it, pull it, lift it or carry it, Challenger MT600B Series tractors are built for the task. Standard amenities on all models include an Electronic 3-point hitch, four remote hydraulic outlets and a choice of power take-off (PTO) systems to match your operation. Expand the capabilities even further with an optional front 3-point hitch and up to six hydraulic remotes.

High-Performance Hydraulics

MT600B Series Tractors feature a closed-center, pressure and flow-compensated hydraulic system that provides flow to multiple functions at up to 39gpm (150 lpm) and 2,900 psi. Timing and flow are individually adjustable to four electro-hydraulic valves that are fingertip controlled from the armrest. A power beyond circuit and a load-sensing line are also standard, while a fifth and sixth spool valve, which include individual timing and flow adjustment, are optional.

A second pump, mounted in tandem with the auxiliary pump supplies oil for the power steering and brakes, while a third pump supplies oil to the TechStar CVT—ensuring that oil from the remotes and the transmission never mix.



Four in-line electronic remote hydraulic levers are sized and positioned for intuitive operation and fingertip control. One or two additional electronic levers, located on the right console, control optional fifth and sixth implement remote valves.



Customize Hydraulic Settings

Customize hydraulic settings to suit specific requirements with the new Power Performance III command center. Using the touch keys and rotary dial, the operator can regulate the flow rate for lifting and lowering, adjust the actuation time and lock or unlock each remote.

Adaptable Power Take-Off (PTO)



Take your choice of two PTO systems, depending upon the way you farm and your cropping program. Standard is a 540/1,000 rpm shaft drive that is electronically controlled through a wet multi-disc clutch. Or choose the same qualities in a 540 Economy/1,000 rpm system. The economy PTO, designed for lighter load situations, allows the engine speed to be reduced by 23 percent to 1,550 rpm, yet maintain full 540 PTO shaft speed. This helps reduce fuel consumption and noise, as well as wear and tear on the engine, while increasing productivity.



The front weight bracket on the MT600B Series uses the same suitcase weights as the MT700 Series. The benefits include better ground clearance and better weight utilization, as well as the potential for Challenger customers who own both track and wheel tractors to save money.

PTO speed with either system is digitally displayed on the dash panel for precise control of PTO driven implements. Both systems are also hydraulically actuated for smooth modulation and system protection. A 6-spline, 1 3/8" shaft is installed; however, 21-spline 1 3/8" and 20-spline,1 3/4" shafts are included.



Optional Front 3-Point Hitch And Hydraulics

Put additional equipment up front with an optional front 3-point hitch and hydraulic remotes. Equipped with a standard 3-point linkage to handle cultivators, plows, fertilizer tanks, etc., the front linkage has a capacity of either 7,700 lbs. or 12,100 lbs.

Hydraulic accumulators are also available to absorb shock during the transport of mounted equipment. Meanwhile, the front hydraulic remotes feature the same pressure and flow as the rear remotes—2,900 psi and 39 gpm.




POWER
Challenger
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The Challenge





Select the perfect exterior lighting combination via a convenient touchpad. Indicator lights around the helpful tractor schematic illuminate as each set of lights is switched on with the touch of a button.

Designed to keep you going around the clock

The days can get pretty long come planting time or harvest. Fortunately, Challenger MT600B Series tractors are built to maintain your productivity, regardless of the time of day or the temperature outdoors.

Fewer Fuel Stops

The redesigned 159-gallon fuel tank, combined with the economy of the new Challenger "Endurance" engine, lets you work long hours between refills.

Notice, too, that the self-cleaning cab steps have been recessed into a tank cavity, which provides a barrier on each side for safer access to and from the cab. We even molded a toolbox into the front of the tank for service convenience.

Making Daylight

Don't worry about working late to beat the weather, or starting before daylight. The MT600B Series helps you make the most of long days with a full bank of hi/lo halogen work lights. Standard equipment includes two headlamps, two front and two rear double element work lights and two field lights per side on the steps and fenders. Features include taillights, flashing warning lights and turn signals. One or two rotating beacons are also available as an option.

Take Lighting To The Next Level

Burn an even bigger hole in the night with the Challenger Nightbreaker™ HID lighting package. This valuable option replaces four of the halogen roof lights with HID Xenon lights that provide up to 30 percent greater nighttime visibility. The increase in the amount of pure white light is also easier on the eyes.

A Panoramic Vista

In addition to offering 61-square-feet (5.6 m2) of usable glass area, the Challenger MT600B Series tractors feature a contoured, sloping hood with a center site marker that provides an unobstructed, panoramic view of the field.

A Clear View Of Wide Implements



The view behind is clear in any weather with optional side mirrors that include electrical in-cab adjustment and electric de-icing. Even without the option, you'll appreciate two large, telescoping side mirrors, plus an inside mirror, as a supplement to the unobstructed view through the rear window.



Combine quality Cat service with our 24-hour-a-day parts network and you have the absolute gold standard in dealer support.

Easy access

means maintenance is no longer a chore

The single-piece hood on the MT600B is more than stylish and unobtrusive. It's also service-friendly and functional. Lift the front section to reveal the entire cooling system, or lift the entire hood vertically for easy access to fill points, the air cleaner and other engine components.

- Cooling components swing out for easy access to the air conditioner condenser, hydraulic oil cooler and radiator.
- Batteries are easy to reach for inspection and service - yet protected from mud and debris.
- Hydraulic oil levels can be monitored from the information display on the dash so you can keep an eye on it as you operate implements.
- The advanced design of the new Challenger "Endurance" engine extends service intervals to 500 hours.
- The dual-element air cleaner is positioned directly above the engine for easy inspection and replacement - which is less frequent, thanks to a new, aspirated pre-cleaning system.

World-Renowned Dealers, World-Class Service

Downtime is rarely scheduled and never convenient. Fortunately, when you buy a Challenger MT600B Series tractor, you get the backing and support of the legendary network of Cat dealers... who take downtime seriously. For nearly 100 years, Cat dealers have been keeping construction, mining, roadwork and just about every type of heavy-machine equipment in the world up and running... 365 days a year, day and night, under the most adverse conditions.

If they can handle on-site repair of a 20-ton earthmover, does it really make sense to buy a tractor from a dealership that performs all its service in the shop? Cat dealers are second to none in on-location service. Plus, their factory-trained technicians work as hard at preventing problems as they do at repairing them.

With more mobile service trucks loaded with more diagnostic equipment than most repair shops, it's little wonder that the new wave of Cat loyalists is coming from the farm.





Every Challenger purchase

comes with World-Class commitment

When you purchase a Challenger MT600B, or any other Challenger model, you're buying a lot more than a piece of farm machinery. You're purchasing the Challenger commitment to quality and service.

If you haven't already done so, take a close look at the MT600B Series at your local Cat dealership. You'll quickly realize that it's built to the highest standards of quality in terms of components and construction, as well as fit and finish.

But the Challenger customer commitment to its customers extends well beyond steel and rubber. Consider just some of the benefits of being a Challenger customer -

Maximum Warranty Coverage

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

Long-Term Challenger Support

In addition to bringing new thinking to farm equipment, the Challenger brand brings a whole new concept to sales and service through Cat dealers. It is our biggest difference and our greatest strength. And it may be the reason your operation could become more profitable with the assistance of Challenger equipment.

Higher Resale Value

Quality equipment demands a premium price, particularly when there's no competition. Fortunately, a new MT600B is extremely cost competitive, considering its advanced innovation. However, you can bet the technology built into the MT600B Series—like its reliable "Endurance" engine and the TechStar CVT—along with its long-term Cat dealer support, will help it retain its value in the future.

When you combine Serious Machinery with the Serious Dealers of the Caterpillar network, you're looking at value that lasts well into the future.

Standard Equipment:

- Challenger Endurance Engine 4 Valve / 6 Cylinder Turbocharged and After Cooled
- Closed Center, 4-Spool Electro-hydraulic Valves
- Timing and Flow Control on All Valves
- Integrated tractor Control System with Fingertip Control
- Total Flow of 39 GPM (150 LPM)
- Power Beyond and Load Sensing Port
- Lower Link Pin Sensing w/Electronic Lift Control
- Active Transport Control (ATC)
- Left and Right Side External Lift Controls
- 3-Point Linkage: Category III Adjustable Linkage with Mechanical Leveling
- Tilt and Telescopic Steering Column
- Standard Duty Drawbar with Clevis
- Quick Hitch, Category III
- Fieldstar® Ready
- SMV Sign
- Techstar CVT Stepless Continuously Variable Transmission with Dual Lever Control
- Power Performance Display III™ with Color Screen and Data Logging
- Deluxe Cab with Heater and A/C
- Rear View Mirror and two Exterior Telescopic Side View Mirrors
- External Hydraulic Lift Cylinders
- Toolbox
- Air Suspended Swivel Seat with Vertical Height and Backrest Angle Adjustment, Fore/Aft and Side/Side Isolators, Lumbar Support, Seat Belt and Adjustable Left Armrest
- Instructors Seat with Seat Belt
- Shielded Center Line Drive with Electro-Hydraulic Control of Front Wheel Drive and Front Wheel Drive Differential Lock
- Front Weight Frame
- In Cab Electrical Socket
- Molded Rear Fenders
- Double Element Halogen Work Lights

Optional Equipment:

- Pneumatic Cab Suspension
- Deluxe Seat with Semi-Active Suspension
- Automatic Air Conditioning/Climate Control
- Large Telescoping Side Mirrors with Electrical Adjustment and Electric De-Icing
- Fieldstar® Precision Farming System with Choice of Digital Globe Positioning Systems
- Rotating Beacons
- Hydraulic Trailer Brakes
- Xenon Work Lights
- Front 3-Point Hitch, 7,700 or 12,100 lb Lift Capacity at Hitch
- Economy PTO
- Engine Block Heater
- 5th and 6th Spool Valves
- ProMAX™ Implement Response Control Hitch System
- Pivoting Front Fenders
- Front Belly Weight
- Additional Electrical Socket in Cab
- Rear Window Washer/Wiper
- Hitch Viewing Mirror
- Front suitcase and Wheel Weights

SPECIFICATIONS

Challenger MT600B





MODEL		MT635B	MT645B	MT655B	MT665B
ENGINE	Model	Endurance 74ETA	Endurance 74ETA	Endurance 84ETA	Endurance 84ETA
	PTO HP	180 (134 kW)	200 (149 kW)	220 (164 kW)	240 (180 kW)
	Type	In-line, liquid-cooled diesel	In-line, liquid-cooled diesel	In-line, liquid-cooled diesel	In-line, liquid-cooled diesel
	# Cylinders/Valves	6/24	6/24	6/24	6/24
	Displacement (CID/L)	451/7.4	451/7.4	512/8.4	512/8.4
	Rated Speed	2,200	2,200	2,200	2,200
	Aspiration	Turbocharged and aftercooled	Turbocharged and aftercooled	Turbocharged and aftercooled	Turbocharged and aftercooled
	Bore (in/mm)	4.3/108	4.3/108	4.4/111	4.4/111
	Stroke (in/mm)	5.3/136	5.3/136	5.7/145	5. 7/145
FUEL SYSTEM		Bosch radial-piston pump - electronically controlled	Bosch radial-piston pump - electronically controlled	Bosch radial-piston pump - electronically controlled	Bosch radial-piston pump - electronically controlled
TRANSMISSION	Type	TechStar CVT	TechStar CVT	TechStar CVT	TechStar CVT
	Speed Range (mph/kph)	0.01 to 25 mph (0.03 to 40 kph)	0.01 to 25 mph (0.03 to 40 kph)	0.01 to 25 mph (0.03 to 40 kph)	0.01 to 25 mph (0.03 to 40 kph)
AXLES	Front (standard)	AG210 High pivot MFD	AG210 High pivot MFD	AG280 High pivot MFD	AG280 High pivot MFD
	Rear Bar Axle (in/mm)	118/3,000 – 4.33/110 dia.	118/3,000 – 4.33/110 dia.	118/3,000 – 4.33/110 dia.	118/3,000 – 4.33/110 dia.
	Tread Width-18.4 tires (in/mm)	60 to 88/1,524 to 2,235	60 to 88/1,524 to 2,235	60 to 88/1,524 to 2,235	60 to 88/1,524 to 2,235
DIFFERENTIAL LOCK		Electrohydraulic front & rear	Electrohydraulic front & rear	Electrohydraulic front & rear	Electrohydraulic front & rear
BRAKES	Rear	Hydraulic wet multi-disc	Hydraulic wet multi-disc	Hydraulic wet multi-disc	Hydraulic wet multi-disc
	Front	Wet brakes on cardan shaft	Wet brakes on cardan shaft	Wet brakes on cardan shaft	Wet brakes on cardan shaft
INDEPENDENT PTO	Type	Electronically controlled	Electronically controlled	Electronically controlled	Electronically controlled
	Speed	540/1,000 rpm or	540/1,000 rpm or	540/1,000 rpm or	540/1,000 rpm or
	(Optional)	540 Economy/1,000 rpm	540 Economy/1,000 rpm	540 Economy/1,000 rpm	540 Economy/1,000 rpm
ELECTRICAL SYSTEM	Alternator	150 amp.	150 amp.	150 amp.	150 amp.
	Batteries	(2) 775 cca 12-V	(2) 775 cca 12-V	(2) 775 cca 12-V	(2) 775 cca 12-V
	Block Heater (Optional)	1,000 watt coolant heater	1,000 watt coolant heater	1,000 watt coolant heater	1,000 watt coolant heater
HYDRAULIC SYSTEM	Type	Pressure/flow compensated	Pressure/flow compensated	Pressure/flow compensated	Pressure/flow compensated
	# Remotes (std/opt.)	4/up to 6	4/up to 6	4/up to 6	4/up to 6
	Max. Pressure (PSI/BAR)	2,900/200	2,900/200	2,900/200	2,900/200
	Max. Flow (gpm/lpm), at remotes	39/147	39/147	39/147	39/147
3-POINT HITCH	Control	Electronic	Electronic	Electronic	Electronic
	Draft Sensing	Lower link	Lower link	Lower link	Lower link
	Rear Hitch	Cat. 3, adjustable linkage	Cat. 3, adjustable linkage	Cat. 3, adjustable linkage	Cat. 3, adjustable linkage
	Lift Capacity @ 24" (lbs/kg)	15,600/7,078	15,600/7,078	15,600/7,078	15,600/7078
	Front Hitch (Optional)	Cat. 2	Cat 2	Cat. 2	Cat. 2
	Lift Capacity (lbs/kg)	7,700/3,500 or 12,100/5,500	7,700/3,500 or 12,100/5,500	7,700/3,500 or 12,100/5,500	7,700/3,500 or 12,100/5,500
STEERING		Full power hydrostatic	Full power hydrostatic	Full power hydrostatic	Full power hydrostatic
CAPACITIES	Fuel Tank (gal/L)	159/600	159/600	159/600	159/600
	Cooling System (gal/L)	8.9/34	8.9/34	8.9/34	8.9/34
	Engine Crankcase (qt/L)	20/19	20/19	20/19	20/19
	Hydraulic System (gal/L)	26.4/100	26.4/100	26.4/100	26.4/100
	TechStar CVT (gal/L)	17.7/67	17.7/67	17.7/67	17.7/67
DIMENSIONS	Wheelbase (in/mm)	121/3,075	121/3,075	121/3,075	121/3,075
	Minimum Width (in/mm)	118/3,000	118/3,000	118/3,000	118/3,000
	Height Top of Cab (in/mm)	123.6/3,140	123.6/3,140	123.6/3,140	123.6/3,140
	Overall Length (in/mm)	206/5,240	206/5,240	206/5,240	206/5,240
	Axle Clearance (in/mm)	22.44/570	22.44/570	22.44/570	22.44/570
	Shipping Weight (lbs/kg)	18,308/8,304	18,308/8,304	19,550/8,868	19,550/8,868

Shipping weight is with pressed steel, single rear wheels.







Cat dealers and service
world-renowned dealers, world-class service

In addition to bringing new thinking to machines, the Challenger team brings a whole new concept to sales and service through Cat dealers. It may be our biggest difference and our greatest strength. And it may be the reason your operation could become more profitable with Challenger equipment.

When you buy Challenger equipment you get the backing and support of the legendary network of Cat dealers. People who have been keeping contractors, construction, mining, landscaping, roadwork and just about every heavy-machine demand undertaking in the world, up and running…365 days a year, day and night. People who don't take downtime lightly. That's why we're already creating Challenger brand loyalists—because every Challenger machine is backed by the same support. In fact, Cat dealers are second to none in on-location service.

With more mobile service trucks loaded with more diagnostic equipment than most repair shops, and better-trained technicians who work as hard at preventing problems as they do at repairing them.

Combine it all with our 24-hour-a-day parts network and you have the absolute gold standard in service. And it's all at work, ready to maximize your productivity and uptime.

Plus, Cat dealers have a rock-solid commitment to agriculture. This partnership solidifies their confidence in the Challenger product by putting their name behind the sales force and service network. Combining Serious Machinery with the Serious Dealers of Caterpillar is shifting the way things have always been done. A shift we're certain you'll agree will soon be the standard to beat.

Challenger® FINANCE

At Challenger Finance, we understand 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.

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 Caterpillar dealership.

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