

Challenger MT700B

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We're up to
The Challenge

MT700B SERIES

225 to 265 PTO HP

Serious Machinery that's built on experience

It was Thanksgiving Day 1904 that Benjamin Holt first demonstrated his innovative concept for a machine that moved on self-laying tracks. In 1931, the Caterpillar Tractor Company introduced the world's first production diesel track tractor.

One hundred years of experience is something you can't buy. And it can't be copied, even though some have tried. If there's any doubt, take a look at the new Challenger® MT700B Series track tractors.

Built on the compaction-reducing foundation of Mobil-trac™ technology, these fourth generation Challenger tractors promise industry-leading performance and peak efficiency for maximum payback on your specific operation.



Made in America - Jackson, MN Manufacturing and Operations Plant.

Challenging The Future Of Tractor Performance

While operator comfort and control have been enhanced in the new "B" Series tractors, the newest advancement is under the hood.

Just when most tractor companies are adding Tier II diesel engines to meet off-road emissions standards, Challenger tractors are reaching new levels with the new Caterpillar **ACERT**® Technology Tier III engine. Among its numerous benefits is more power from each model, without a compromise in economy or performance.

It's little wonder that Challenger equipment has become the prominent choice of professional and commercial producers whose output represents 75% of the world's commodity production.

Model	Gross Engine HP	PTO HP
MT745B	269 (201 kW)	225 (168 kW)
MT755B	301 (224 kW)	245 (183 kW)
MT765B	320 (239 kW)	265 (198 kW)

Challenger Merges The Best Of Both Worlds

For nearly two decades, Challenger track tractors have been the leading choice among producers who face challenging conditions - whether mud, compaction or the need for better traction. But consider for a moment how many farmers buy their pickup and the family car from the same dealership. Exactly! There are benefits to buying multiple products from a single dealership, particularly when it's one that commands as much respect for their integrity, in-field service and parts support as the Cat dealer network.

That was also the philosophy when AGCO® Corporation partnered with Caterpillar and the Cat® dealer organization to develop the highest level of customer satisfaction in the world. It all started in March 2002, when AGCO Corporation acquired the 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 23 to 240 PTO HP; a high-quality family of hay equipment, and two of the most reliable and most productive combines available anywhere. Of course, we continue to offer the most innovative and advanced track tractors in the world, including the new **MT700B** and **MT800B** Series models. All built to the toughest standards in the industry.

No wonder Challenger is the fastest-growing equipment brand in North America. 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.



Over the past century, Cat® Powered tractors have been synonymous with power and productivity while building the Alaskan Highway, Pacific island runways during World War II and road construction projects in every corner of the globe. They can do the same for your farming operation.



We're up to
The Challenge 3



“Extra traction
doesn't do me much
good without the
horsepower to back
it up. But I want
economy, too. What
have you got to offer?”



POWER

Challenger Introduces ACERT® Technology

There's a new name in Caterpillar diesel engine technology and Challenger track tractors are among the first to put it in the field. Featuring new ACERT Technology, the Cat C9 engines used in the MT700B Series meet all mandated engine emissions requirements... without sacrificing performance, durability or reliability.



ACERT Technology controls the combustion process such that emissions are minimized and performance is improved. While many companies are resorting to exhaust gas recirculation (EGR) technology to meet aggressive Tier III standards, Caterpillar has taken a different path, developing more than 250 patents in the process.

Leading the class with 537 cubic inches (8.8 L) of displacement and 52 percent PTO torque rise, the Cat C9 ACERT Technology engine delivers exceptional pulling power in all conditions. PTO power growth up to 13 percent will have you downshifting a lot less frequently, too.



ADEM™ A4 Electronics

As an integral part of the Intellitratics™ network, the new ADEM A4 System electronics control system delivers power smoothly by coordinating communication between all tractor electronic control modules.

The ADEM A4 ECM system does everything the previous ADEM III System did in terms of fine-tuning fuel-air ratios. However, the improvements developed as part of the ACERT Technology take diesel engine performance even further:

- Multiple injections of small amounts of fuel at precise times achieve better fuel economy, lower emissions, and improved response at reduced noise levels.
- ACERT Technology maintains engine power even with changing fuel temperatures.
- The patented Hydraulic Electric Unit Injector (HEUI) fuel delivery system improves tractor performance across the entire operating range.



Higher injection pressures generated by the HEUI's and tailored fuel injection rates improve fuel economy.

- High-strength, mid-supported, wet cylinder liners lower emissions, reduce vibration, noise and the cost and time constraints of engine repairs.
- Four valves per cylinder combined with the high-capacity wastegate turbocharger and air-to-air aftercooler provide plenty of airflow for more power and greater fuel economy.

We're up to
The Challenge

Make The Shift

to greater productivity

It takes a special powertrain for a track tractor... not an adaptation of a wheel tractor powershift. That's why the Challenger MT700B Series features a Cat transmission built from the ground up specifically for a rubber-belted ag tractor.

The only one of its type in the industry, the 16F X 4R electronically controlled powershift was extensively tested in tough, real-world situations like yours before it was ever released to production. Still, every powertrain that travels down the assembly line is retested to ensure it meets Challenger specifications before going into an MT700B Series tractor.

Electronic Communication

Hundreds of times per second, the Challenger Intellitronics network analyzes signals from the Cat transmission and the Cat ACERT Technology engine to provide maximum flexibility and performance.

Before the transmission executes a shift, for example, it first senses how much load the engine is experiencing so it can deliver the smoothest shift possible. Working in partnership with the Intellitronics network, Power Management then offers three different shifting programs, using automatic shifting.

Speed-Sensitive Steering For Precise Control

Unlike a wheel tractor, an MT700B Series track tractor steers by changing the ratio of the right and left drives in response to the electrohydraulic differential steering system.

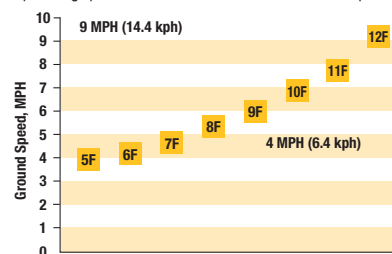
True speed-sensitive steering, automatically and infinitely adjusted over the full speed range, is a standard feature on all MT700B Series tractors. That means at slower speeds, the steering is more touch sensitive, with minimal inputs required to make corrections. At higher transport speeds, the steering is less sensitive, so corrections are safe and predictable. You'll swear you're driving a wheeled machine.



Shift and Power Management buttons are placed close at hand for maximum productivity. In park position, steering is locked preventing inadvertent machine movements.

Built For The Field

Eight gears in the popular 4 to 9.3 mph (6.5 to 14.9 km/h) operating range provide the responsiveness and productivity your applications need. Closely spaced gear splits, concentrated in the primary working range, were designed with the engine torque rise and operating rpm in mind to deliver the most usable power.



Advanced Speed Control

Pre-select any starting gear up to 10th gear forward; then shift sequentially, using the buttons on the transmission lever, to change gear settings. You can also program any forward gear between 1 and 7, using the TMC, as the default starting gear. Once set, it remains in memory, even after power down.

One-Touch™ Multi-Shifting

While it functions as a headland management system, the One-Touch management system also allows the operator to make multiple gearshifts at the push of a button. In "shift" mode, the One-Touch rocker switch up or downshifts a pre-selected one, two, three or four gears at a time. Exclusive to Challenger, the system remembers only the number of gears to up or downshift, rather than the exact gears.

Power Management Made Easy

Designed to get the job done faster and more efficiently, Power Management is a control strategy that coordinates engine speed with transmission and hitch settings in any of three different modes.

While the desired mode is selected at the TMC, engagement and disengagement is as easy as pushing the bottom button on the transmission control lever. Once selected, the Power Management mode is retained even after power shutdown.

Maximum Power Output

Heavy draft loads, such as a disc ripper, demand maximum power for top productivity. Maximum Output mode automatically shifts to keep the engine in the peak power range where horsepower is maximized.

Constant Engine Speed

When operating a PTO-driven implement, Constant Engine Speed mode maintains a preset engine speed to optimize efficiency and maintain a constant PTO rpm.

Constant Ground Speed

Spray or incorporate chemicals using the Constant Ground Speed mode. Like cruise control on your automobile, the tractor achieves a preset ground speed by varying the engine speed. However, Constant Ground Speed will also automatically downshift under high load conditions to prevent engine stall. Once the load reduces, Power Management automatically up-shifts to the desired ground speed.



“With our short growing season, I can’t always wait for the ground to dry out. I need a tractor that gives me **both** flotation and traction.”

LEADER



We're up to
The Challenge 7



“During planting and harvest season the days can get pretty long. That’s when a comfortable ride moves to the top of the ‘wish’ list.”



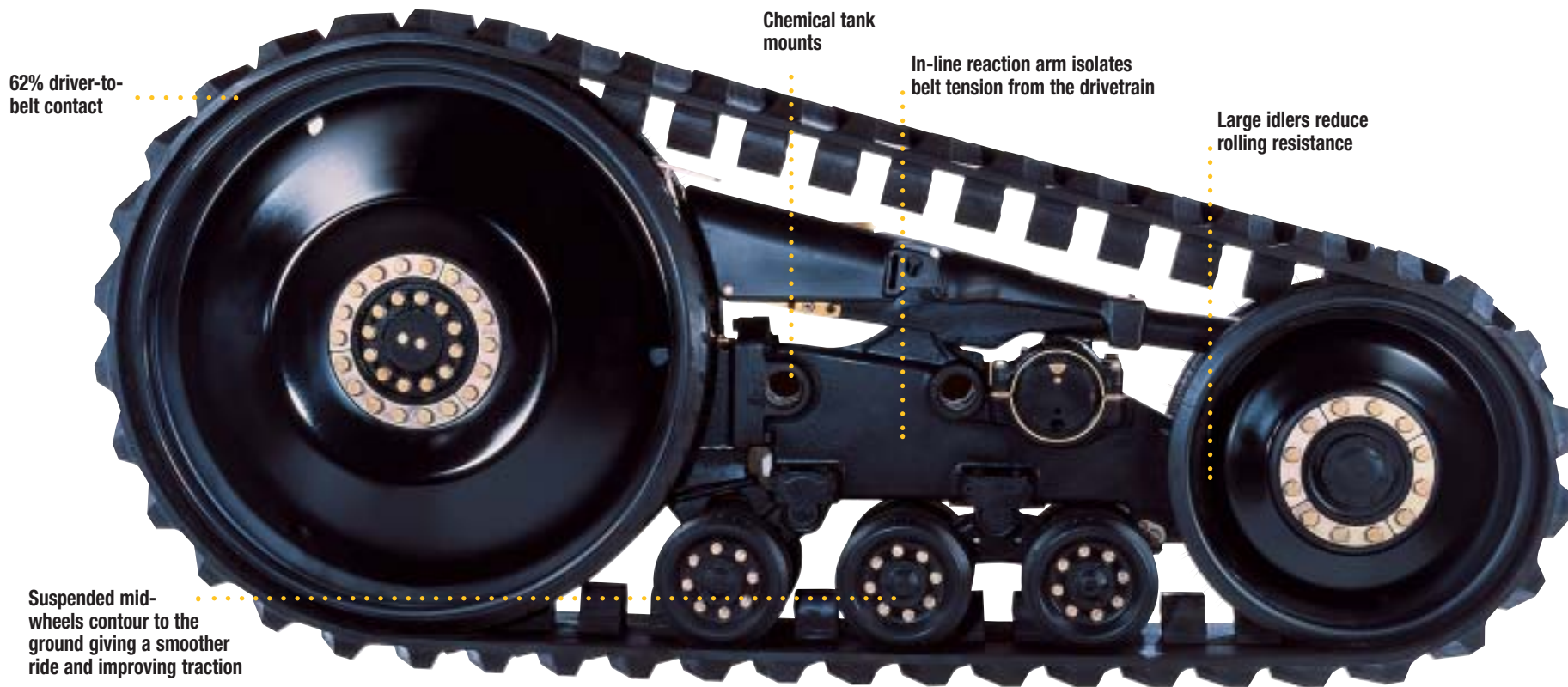
SMOOTH

The Industry Leader in track technology

Think all competitive track systems are pretty much alike? Just ask a rice farmer in Arkansas... or anyone else who works in ankle-deep mud. They'll quickly tell you there's nothing that compares to Challenger's Mobil-trac™ system.

However, the same track technology that helps a Challenger track tractor float over crusted rice fields also enhances traction and reduces compaction in your corn, soybean, cotton or wheat fields. All the while, you're assured of the speed and mobility benefits that owners have come to expect from Challenger track tractors.

At 96 inches (2,438 mm), the Mobil-trac system wheelbase is the longest in its power class. Thanks to the long wheelbase and five-axle design, tractor weight is distributed over a greater area, reducing deep compaction that restricts plant root growth, even with the narrow 14-inch belts (356 mm). Lower rolling resistance also transfers more power to the ground and improves fuel efficiency.



The Softest Ride In The Industry

Superior traction is one of the benefits of the Challenger Mobil-trac system, but its comfort is unsurpassed in the industry.

Rough fields can drain operator efficiency and stamina. The Challenger MT700B Series tractors help nurture both, starting at the Mobil-trac system.

- The Opti-Ride™ Suspension cushions every ridge, bump and rut the tractor encounters. High-tech rubber/fabric springs isolate the hardbar from the chassis of the tractor and absorb shocks to the operator. A robust stabilizer

bar enables the left and right undercarriages to move up and down independently, allowing the hardbar to tilt to an 8-degree angle and smoothly walk over obstacles.

- Suspended midwheels contribute to a smooth ride by creating a bridge over field obstructions. In effect, the midwheels mold to the surface of the ground, cushioning the impact of uneven terrain. Additional rubber cushioning added to drivers, midwheels and idlers further enhances the ride.
- Lower rolling resistance, plenty of belt-to-driver grip (62 percent of the driver circumference is in contact with the belt) and longer belt life are among the benefits of the large diameter driver, the largest in its class. The wide chevron

grooves on the surface of the driver optimize mud rejection and driver grip.

- The unique in-line reaction arm tensions each belt independently and keeps that tension in-line, isolating it from the tractor drive axles and frame. The 16,000 pounds (71.15 kN) of tension provides optimum belt-to-driver grip without placing stress on the tractor frame. Gauge changes can be made without spacers and without detensioning the belt, which makes it much simpler and quicker to change from row-crop to tillage applications and back.
- The 37-inch (940 mm) diameter front idler improves fuel efficiency by reducing rolling resistance. The smooth, rubber-coated surface helps reduce vibration.

- Mounting holes for chemical tanks and other attachments are already built into the Mobil-trac system to ensure maximum versatility and tractor balance.



Up to 24.6 MPH

Featuring the highest transport speed of any track tractor, Challenger MT700B Series tractors travel up to 24.6 mph (39.6 km/h) for quicker moves between fields and more productivity per day.

We're up to
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The Most Undercarriage Options in the industry

Nobody offers more undercarriage options than Challenger... period. Pick the appropriate MT700B Series model and gauge option, then select the belt width and type, and the width of the idlers, drivers and midwheels to tailor your tractor to your applications. Belts are available in six widths and three types, while idlers, midwheels and drivers are available in up to three widths to improve belt life and belt-to-driver performance.

Standard, Wide Or Ultra Wide

Challenger MT700B Series tractors offer producers the flexibility to match virtually any cropping situation - whether it's narrow-row cultivation or dry land wheat farming in half-section fields - with gauge width as wide as 160 inches (4,064 mm).

Equally important, gauge settings are infinitely adjustable within each of the three gauge options, so you don't have to settle for 2- to 4-inch increments. Standard gauge ranges from 60 to 88 inches (1,524 - 2,235 mm); wide gauge varies from 80 to 120 inches (2,032 - 3,048 mm), and ultra wide gauge ranges from 120 to 160 inches (3,048 - 4,064 mm).

Move the ultra wide gauge to 144 inches, for example, to straddle four 36-inch rows of potatoes. No other track tractor can go beyond four 30-inch rows. Or simply spread any gauge option to a wider setting for easier turns under load and improved stability.



STANDARD (60 to 88 in.)



WIDE (80 to 120 in.)



ULTRA WIDE (120 to 160 in.)

Fast, Easy Gauge Changes

In under two hours, easily change gauge settings without detensioning the belt and switch from row crop to tillage or back. Simply loosen the hardbar clamps and axle collet bolts and support the tractor. Then, using the gauge adjustment tool, set the gauge to the desired width to match the gauge and crop row width - the cab steps can also be adjusted easily, from 60 to 80 inches (1,524 - 2,032 mm).



Three Types; Six Widths

Challenger MT700B Series tractors not only give you more belt width choices than anyone else. We also offer three different belt types to match your row spacing or work conditions

General Ag Belt

This all-purpose belt provides an excellent ride with superior belt alignment and traction in a wide-range of field conditions. Available in five widths, the general ag belt is equipped with 46, 4.5-inch (115 mm) long guide blocks and 92, 2.7-inch (68.5 mm) tall tread bars, 46 tread bars on diagonal tread belts.



Low-Profile Belt

Your best choice in situations where little ground disturbance is desired, the low-profile belt features more tread bars (130) that are shorter, 1.5-inch (38 mm), and wider than those found on the general ag belt. Available in three widths, the narrow 16-inch (406 mm) belt width uses a diagonal tread bar pattern to maximize self-cleaning capabilities and flotation. Wider belts use the chevron tread bar pattern.





Extreme Service Belt

This tough belt is a good choice for applications that involve a large amount of road travel, steep side slopes or abrasive underfoot conditions. The six widths of extreme application belts are equipped with longer, 5.3-inch (135 mm) guide blocks, taller, 3-inch (76 mm) tread bars, an additional layer of steel cables and an extra layer of rubber. The narrow 14-inch (356 mm) and 16-inch (406 mm) extreme application belts use a diagonal tread bar pattern to further extend belt life and self-cleaning capability. Wider belts use the chevron tread bar pattern.

	14"	16"	18"	20"	25"	30"
General Ag Belt		X	X	X	X	X
Low-Profile Belt		X	X		X	
Extreme Service Belt	X	X	X	X	X	X

Rubber compounds individually formulated for tread bars, belt body and guide blocks are used in the belt manufacturing process. A patented arrangement of four or more layers of steel cable provides precise tracking and durability.

Matching Wheel Components

Undercarriage midwheels and drivers are available in three different widths - narrow, medium and wide - to maximize the life of each belt option. Narrow and medium idlers satisfy the remaining requirements.



The best wheel stock for your farm depends on the belt width, soil types and travel requirements. In wet conditions, wide belts and wide wheel combinations enhance belt-to-driver performance, improve flotation and decrease ground slip.

Balance The Load With Ballast

Proper ballasting is essential for peak performance, whether you're running on tracks or tires. Challenger offers everything you need to balance the load for maximum traction and fuel efficiency. Options include a full rack of front suitcase weights, and idler wheel weights.



We're up to
The Challenge

The Benchmark

in hydraulic power

Challenger MT700B Series tractors raise the bar on hydraulic power... literally. The load-sensing, closed-center pressure-compensating system provides an industry-leading 43.5 gpm (164.7 Lpm) at up to 2,900 psi (200bar), to fit the way you really use hydraulics.



Standard amenities on all models include four remote electric-over-hydraulic circuits to match your operation. Expand the capabilities even further with up to six hydraulic remotes, a power beyond system and a choice of two high-flow case drain options - Pioneer or flat-faced couplers.

Dial-In Flow

Remote implement hydraulics are electronically controlled via the Intellitronics network for precise management. Using the Tractor Management Center (TMC) and up to five in-line remote levers, you can feather in flow changes on the go, adjust timed detents and precisely adjust individual valve operation. An additional lever lies just behind the hand rest for the optional sixth remote valve.

Load Independent Flow Division

Exclusive to Challenger, Load Independent Flow Division (LIFD) is an indispensable feature. LIFD ensures proportional oil flow to all circuits when the system is operating at full capacity. This is particularly important in applications like seeding, where continuous operation of a hydraulically driven system is critical.

Instead of diverting hydraulic flow from one job to another, LIFD reduces flow to all demands proportionally. That means hydraulic drive motors continue to operate non-stop, even when hydraulics are in high demand.

DURABLE



Hitch Up

to maximum productivity

When you hitch up an MT700B Series model you can rest comfortably, knowing that the standard drawbar and 3-point hitch were designed as an integral component of the tractor, not an add-on. Balance and load-carrying requirements were carefully examined and integrated into the design process. The result?

Eight Tons Of Lift Capacity

A lift capacity in excess of 16,000 pounds (7,260 kg), on the anything-but-standard 3-point hitch offers the greatest in-class lift capacity. A heavy-duty quick coupler is standard for fast implement hook-up.



Steerable 3-Point Hitch

For even more control and versatility, step up to the Challenger exclusive steerable 3-point hitch. This unique option improves tractor steering control and row corrections, especially in narrower gauge applications. With float, fixed or dampened side-to-side movement, the steerable hitch can improve turning radius by up to 60 percent and compensate for implement side-hill draft.

The Intellitronics network communicates the 3-point hitch controls from the Tractor Management Center, allowing you to adjust maximum lift height, lift/lower speed, draft control, etc. Position settings on the steerable 3-point hitch are also controlled via the TMC.



Standard Drawbars Pull Their Weight

Thicker and wider than the average hitch, the standard drawbar can swing nine degrees from the tractor centerline when unpinned. Rubber bumpers and wear plates are standard to

cushion shock loads and ensure long life. Also standard is a trigger hitch pin, which makes one-person implement hook-up simple and convenient.



Wide-Swing Drawbar

For tillage operations, where there's no need for a 3-point hitch, a wide-swinging drawbar option swings a full +/- 32 degrees, making it ideal for use in solid-seeded crops or field tillage. Unique tapered rollers virtually eliminate wear as they easily roll on the swing path. Standard rubber bumpers also minimize shock loads during turns.

A standard 20-spline, 1 3/4" shaft, 1,000 rpm PTO is electronically controlled through a hydraulically actuated wet multi-disc clutch for smooth modulated starting.

We're up to
The Challenge

COMFORT



Your Corporate Office in the field

One Challenger owner said it best, "It's like sitting in an office, except the scenery is always changing."

Consider the MT700B cab a promotion to the corner office. Designed by ergonomic specialists, with the help of farmers like you, the new MT700B cab offers more comfort and control than ever imagined.

The first thing you'll notice is the impressive size. Stretch out in 108 cubic feet (3.06 m³) of space - more cubic feet of luxury than all others in its power class. The MT700B Series cab is quieter than its predecessor, too, by an average of 2 dB, for a new level of solace that helps you work longer hours with less fatigue.

Spend Your Day On A Cushion Of Air

Enjoy a smooth ride in an air-suspension seat that adapts to virtually any size operator. Standard adjustments include:

- Seat height and suspension
- Fore and aft seat position
- Lumbar support
- Seat back tilt position (110° range)
- Horizontal isolation (2" travel)
- Swivel control (25° right and 10° left)

Designed specifically for the Challenger track tractors, the patented single-spoke steering wheel provides optimum steering comfort without obstructing visibility. A specially textured and molded round "ball" works much like the old-time "spinner ball" for faster turns on end rows.

Put control of the radio at your fingertips with optional remote radio controls mounted on the steering wheel. Now, you can make sound system adjustments without taking your hands off of the wheel.

Deluxe, Semi-Active Seat

For the ultimate in operator comfort, upgrade to the optional semi-active, heated operator seat. Computer-controlled damping provides continuous real-time automatic damping force in any of three positions.

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 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.

Comfortable In Any Weather

The Surround-Flow™ ventilation system keeps you truly comfortable by directing cool or warm air through 12 vents strategically placed throughout the cab. Six vents in the front console, five in the rear cab posts and one to the left of the instructional seat, direct airflow around your entire body. The vents also direct air onto each window for quick defrosting or to create a cool air barrier in the heat of the day.



Office Amenities Throughout

An aristocratic ride is just the beginning of the comfort features you'll find in the MT700B Series' spacious cab. Take a seat and look around at some of the other amenities:

- Ergonomically designed right-hand Tractor Management Center (TMC) with controls organized by function.
- The slim profile dash contributes to maximum forward ground visibility and provides analog and LCD displays for all major tractor and engine functions.
- A large temperature-controlled storage compartment keeps your lunch cool or warm.
- A cell phone holder and outlet within easy reach.
- Additional storage includes a coat hook, a literature storage area and a compartment beneath the instructional seat.

Deluxe Cab Option

A majority of options for the standard cab, including a few that aren't available separately, are wrapped up in one comfort package when you order the deluxe cab. Among its extra features are:

- Deluxe wipers, including rear and right side
- Front sun visor
- Battery disconnect
- Set of four speakers, plus amplified subwoofer
- Six-disc CD changer
- Power pack of additional electrical outlets in cab
- Electric-controlled external mirrors
- Automatic climate control
- Delayed engine shutdown and delayed light shutdown
- Pre-wiring for 2-way FM radio



Shed Some Light On The Subject

Performance and efficiency don't have to suffer when daylight ends. The MT700B Series helps you make the most of long days with a full bank of work lights. Standard equipment includes two halogen headlamps, two each of side floodlights on the beltline, in the rear of the cab and on the rear fenders. Up to two optional rotating beacons are also available for increased visibility and safety.

Take Lighting To The Next Level

Push night-time lighting out to a quarter mile, depending on weather conditions, with Challenger's Nightbreaker™ HID lighting package. This valuable option replaces four of the halogen lights on the deluxe lighting package (two on the front and two on the rear) with HID Xenon lights that provide up to 30% greater night-time visibility. The closer-to-sunlight, white light produced by

HID's improves depth perception and increases efficacy during low-light conditions.

A Panoramic View



Tinted windows and a small cab-roof overhang work together to block the sun's glare and maintain constant cab temperature.

Front and rear sun shade visors help block the sun. New optional right and left side sun shades add comfort.

In addition to offering 67.5 square feet (6.2 m²) of usable glass area, Challenger MT700B Series tractors feature a short, sloping hood that provides an unobstructed, panoramic view of the field.

A Clear View Over Your Shoulder

The rear ROPS cab posts on the MT700B are placed in-line with your shoulders for an unobstructed view of wide, trailed implements. Although the seat swivels, so you can turn and view even the widest tillage equipment, it's not always necessary, thanks to large side mirrors and a wide-angle inside mirror. The deluxe cab also features electronically remote-controlled, heated mirrors that provide a clear view in all weather conditions.

A Clean Sweep In Rainy Weather



Challenger MT700B Series tractors offer maximum visibility in any weather. A full-coverage, parallel-swath wiper blade clears far more glass area than conventional wipers. Optional side and rear wipers improve visibility to implements and the hitch during inclement weather.

Challenger Puts Control and information at your fingertips

Take a seat in the roomy MT700B Series cab and you'll discover that reining in up to 265 PTO horsepower has never been easier. All vital functions are within easy reach for fingertip control of the unique TMC. Using the Intellitronics network, this state-of-the-art center puts you in command with intuitive controls and at-a-glance performance information.

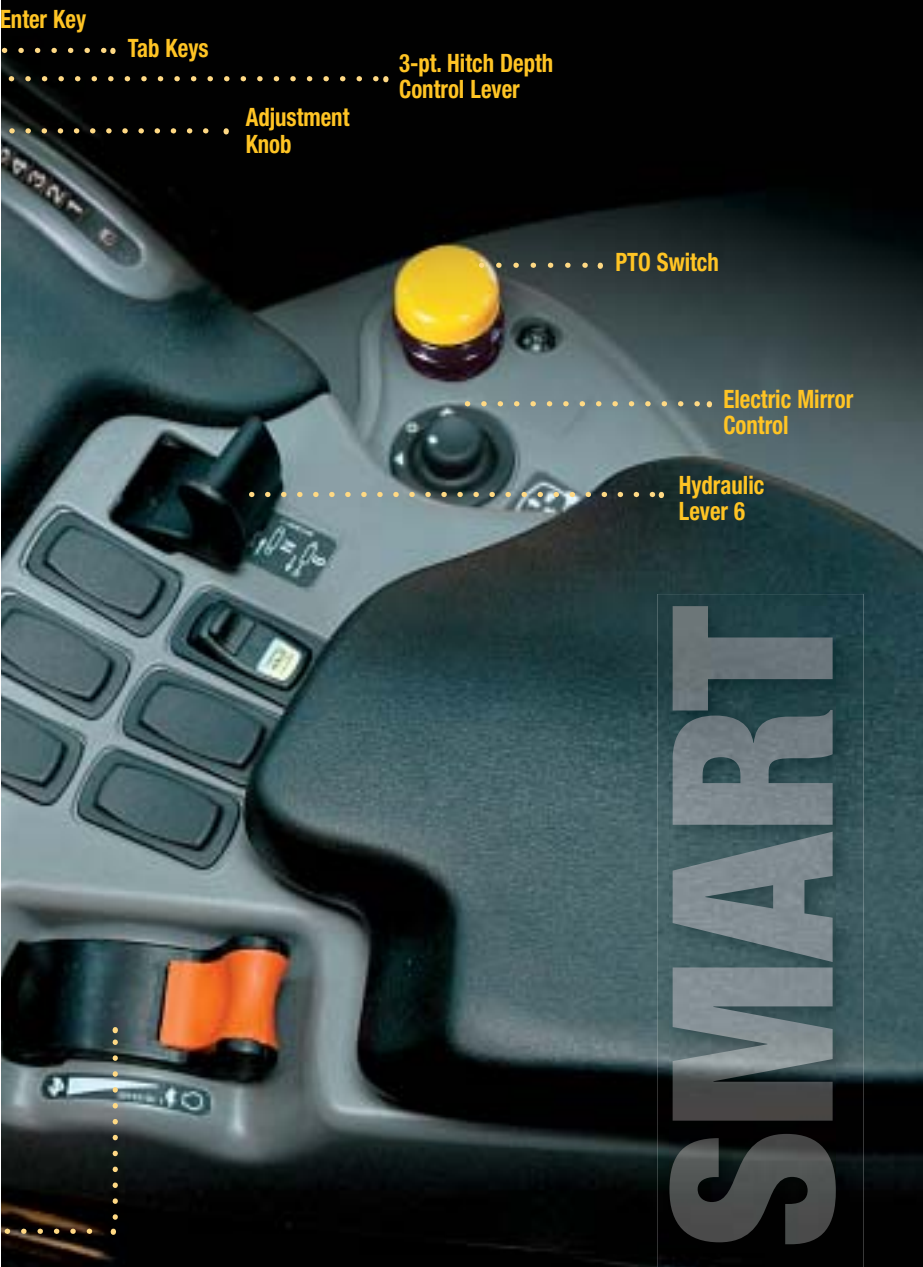
Information On Demand

Vital performance and diagnostic information are shown in an easy-to-read text format using the TMC display screen. The transfective screen technology keeps the display crystal clear, even in direct sunlight. Turn the rotary function selector to any one of the performance monitor screens, like "Summary" or "Fuel Consumption" to review efficiency and attainment. Or dial in "3-point hitch" or "Hydraulics" to optimize settings for precise management.

One-Touch™ Management For Simultaneous Control

The intuitive One-Touch management system gives you the power to initiate several tractor and implement functions at the same time with the simple push of a button. Easy to operate, the One-Touch headland management system uses the Intellitronics™ network to record and execute a myriad of repeated functions, such as transmission shifting, changing engine rpm, raising and lowering the 3-point hitch or implement and engaging and disengaging the PTO. Both "Work" and "Raise" sequences can be recorded to further simplify your application and eliminate possible errors due to fatigue.





Tractor Management Control

- 3-point Hitch Raise/Work Switch
- One-Touch Rocker Switch
- Gear Selection Buttons
- Power Management Button
- Transmission Control Lever
- Creeper Switch
- Throttle Lever
- TMC Display
- Hydraulic Levers 1-5
- Function Selector
- Adjustment Knob
- Enter Key
- Tab Keys
- 3-point Hitch Depth Control Lever
- Roading Lock-out Switch
- Hydraulic Lever 6
- PTO Switch

Rotary Dial Function Descriptors (clockwise from 12 o'clock)

- Summary screen
- Track tension monitor
- Fuel consumption
- Efficiency
- Status screen
- Service screens
- Events
- Set-up
- Auto-Guide Navigation System
- One-Touch
- Power Management
- PTO
- 3-point hitch steering
- 3-point hitch
- Hydraulics 4-6
- Hydraulics 1-3

ACCURATE



Reap The Benefits of Auto-Guide™ navigation system

Skips and overlaps represent resources lost for the cropping year. Fortunately, the Auto-Guide satellite navigation system brings a new level of control and productivity to agriculture that offers the potential to reduce such losses. The GPS-based steer-assist system reduces fatigue and increases operating speeds by guiding the tractor along parallel swaths... pass after pass.

Most importantly, as needs change, it's simple to upgrade your system and signal source to further increase accuracy. No other GPS-based steer-assist system offers this many options – factory or field-installed:

Auto-Guide Option	Class	Static Accuracy	Dynamic Accuracy
WAAS	Sub-meter	+/- 40"	+/- 10"
OmniSTAR VBS	Sub-meter	+/- 24"	+/- 8"
OmniSTAR HP	Decimeter	+/- 4"	+/- 2"
DM Local Base	Decimeter	+/- 4"	+/- 2"
CM Local Base	Centimeter	+/- 1"	+/- 1"

- Sub-Meter System -- +/- 8-10" dynamic accuracy for decreasing overlap and skips in tillage or broad acre applications.
- Decimeter System -- +/- 2" dynamic accuracy to eliminate guess rows and to achieve a new level of accuracy in applications like ridge tilling, zero tillage, controlled traffic patterns and for increasing the accuracy of spraying and spreading operations.
- Centimeter System -- +/- 1" dynamic accuracy for operations that require higher levels of exactness, such as in-row cultivation, band spraying, zone or strip tillage and laying sub-surface drip tape.



A green status indicator on the dash panel signals that Auto-Guide is ready to control the primary steering. When pressing the Auto-Guide™ switch, the system responds with a yellow indicator light, notifying you that the system is engaged as it takes control. It's that simple. Naturally, Auto-Guide disengages as soon as you manually turn the wheel, whether it's at the end row or the middle of the field.

We Put The “Easy” in daily maintenance

At busy times, routine service can take a backseat in the daily checklist. Fortunately, Challenger engineers understand your hectic schedule and have made it easy to perform routine maintenance. With five easy-to-access daily service points, you can complete maintenance inspections at pit-crew efficiency, and get back in the field.

- The tilt-up hood raises from the front, providing excellent access to key service points like batteries and cooling cores. An optional battery disconnect easily cuts electrical power to the tractor.
- The dual-element air cleaner is conveniently positioned directly above the engine for easy inspection and replacement.
- Hydraulic and powertrain oil sight gauges at the rear of the tractor let you check the level at a glance.
- No tools are required to swing open the cooling cores to remove trash build-up or blockage.
- Checking and topping off engine oil is easily accomplished from ground level on the left side of the tractor.
- The cab air filter, conveniently located under the roof overhang on the left side of the cab, is easily removed without tools for cleaning or replacement.
- A large toolbox integrated into the steps carries tools up to 24 inches (610 mm) long with a total capacity of 150 pounds (68 kg).

Service Interval Tracking

Challenger MT700B Series tractors are built smarter to keep you running longer. The innovative TMC system tracks and displays service intervals so you don't have to check shop records to know when the next oil or filter change is due. Abnormal tractor conditions are also displayed, with varying levels of importance, so you can make your own judgment calls on the immediacy of repairs.



Fewer Fuel Stops

Choose from several fuel tank options depending on gauge. Combined with the efficiency of the Caterpillar ACERT Technology engine, you will keep running for a full day or more.

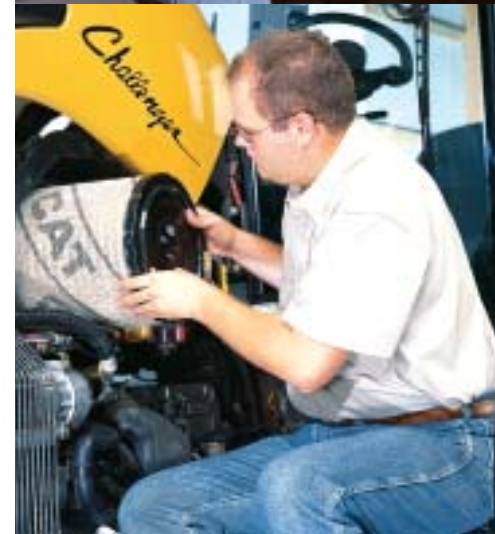
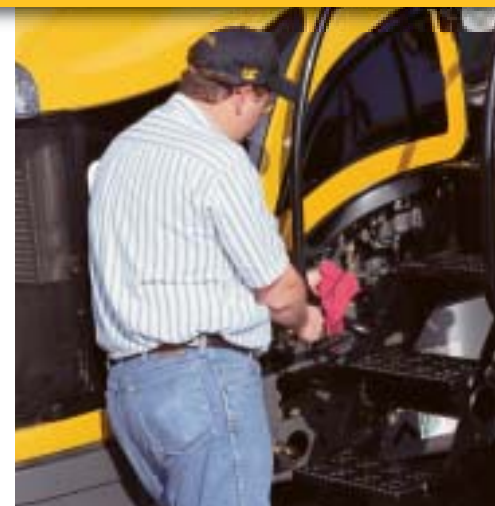
World-Renowned Dealers, World-Class Service

Downtime never seems to come at a convenient time. Fortunately, when you buy a Challenger MT700B Series tractor, you get the backing and support of the legendary network of Cat dealers... who also 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 buying 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.

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





“Downtime can cost me up to \$300 a day... even more if it happens during harvest. Who can afford that kind of expense?”



COMMITMENT

We're up to
The Challenge



Every Challenger Purchase

comes with world-class commitment

When you purchase a Challenger MT700B, 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 MT700B Series at your local Cat dealership. You'll realize that it's built to the highest standards of quality in terms of components and construction, as well as fit and finish. But our commitment to the customer goes far 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 of continued support from your Challenger dealer.

Long-Term Challenger Support

Besides bringing new thinking to farm equipment, we bring 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.

Higher Resale Value

For nearly 20 years, Challenger track tractors have led the industry in performance and technology. So it's little wonder that even five- to 10-year-old machines have brought premium prices on the used-equipment market.

Considering the technology built into the MT700B Series, like its rugged Cat powershift and the Tier 3 Caterpillar ACERT Technology engine - along with its long-term Cat dealer support - you shouldn't expect anything less from today's Challenger models.

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

SPECIFICATIONS

Challenger MT700B

MODEL	MT745B	MT755B	MT765B
ENGINE PTO HP @ rated 2,100 RPM* Gross Engine HP Type # Cylinders / Valves Displacement (cu. in. / L) Engine Torque Rise Aspiration	Caterpillar® C9 ACERT® Technology Tier 3 225 (168 kW) 269 (201 kW) in-line, liquid-cooled diesel 6 / 24 537 / 8.8 42% Turbocharged and air-to-air aftercooled	Caterpillar® C9 ACERT® Technology Tier 3 245 (183 kW) 301 (224 kW) in-line, liquid-cooled diesel 6 / 24 537 / 8.8 42% Turbocharged and air-to-air aftercooled	Caterpillar® C9 ACERT® Technology Tier 3 265 (198 kW) 320 (239 kW) in-line, liquid-cooled diesel 6 / 24 537 / 8.8 42% Turbocharged and air-to-air aftercooled
FUEL SYSTEM	HEUI - ADEM 4 full electronic control	HEUI - ADEM 4 full electronic control	HEUI - ADEM 4 full electronic control
TRANSMISSION Maximum speed (mph / km/h) Creeper, 4 to 1 reduction	Cat® Powershift 16F/4R 24.6 / 39.6 Optional	Cat® Powershift 16F/4R 24.6 / 39.6 Optional	Cat® Powershift 16F/4R 24.6 / 39.6 Optional
DIFFERENTIAL/STEERING	Cat® differential steering	Cat® differential steering	Cat® differential steering
GAUGE OPTIONS Standard Wide Ultra Wide	60" to 88" (1,524-2,235 mm) 80" to 120" (2,032-3,048 mm) 120" to 160" (3,048-4,064 mm)	60" to 88" (1,524-2,235 mm) 80" to 120" (2,032-3,048 mm) 120" to 160" (3,048-4,064 mm)	60" to 88" (1,524-2,235 mm) 80" to 120" (2,032-3,048 mm) 120" to 160" (3,048-4,064 mm)
GAUGE ADJUSTMENT METHOD	infinitely adjustable bar axle & smooth hard-bar	infinitely adjustable bar axle & smooth hard-bar	infinitely adjustable bar axle & smooth hard-bar
BELT OPTIONS Low Profile Tread Bar General Ag Extreme Application	16", 18", 25" (405, 455, 635 mm) 16", 18", 20", 25", 30" (405, 455, 510, 635, 760 mm) 14", 16", 18", 20", 25", 30" (355, 405, 455, 510, 635, 760 mm)	16", 18", 25" (405, 455, 635 mm) 16", 18", 20", 25", 30" (405, 455, 510, 635, 760 mm) 14", 16", 18", 20", 25", 30" (355, 405, 455, 510, 635, 760 mm)	16", 18", 25" (405, 455, 635 mm) 16", 18", 20", 25", 30" (405, 455, 510, 635, 760 mm) 14", 16", 18", 20", 25", 30" (355, 405, 455, 510, 635, 760 mm)
UNDERCARRIAGE Hardbar Suspension Undercarriage Suspension Idlers Midwheels Drivers	Two Marsh Mellow® springs** Suspended Midwheels Narrow, Medium Narrow, Medium, Wide Narrow, Medium, Wide	Two Marsh Mellow® springs** Suspended Midwheels Narrow, Medium Narrow, Medium, Wide Narrow, Medium, Wide	Two Marsh Mellow® springs** Suspended Midwheels Narrow, Medium Narrow, Medium, Wide Narrow, Medium, Wide
INDEPENDENT PTO	1,000 RPM 20-spline 1.75" (45 mm), electronically controlled	1,000 RPM 20-spline 1.75" (45 mm), electronically controlled	1,000 RPM 20-spline 1.75" (45 mm), electronically controlled
ELECTRICAL SYSTEM Alternator Batteries Block Heater (optional)	185 amp (2) 1,000 cca, 12-V 110-V or 220-V	185 amp (2) 1,000 cca, 12-V 110-V or 220-V	185 amp (2) 1,000 cca, 12-V 110-V or 220-V
HYDRAULIC SYSTEM Type Max. flow Max. system pressure Remotes standard/optional	Load-Independent Flow Division (closed-center, pressure-flow compensated) 43.5 GPM (164.7 L/min) 2,900 PSI (200 bar) 4 / up to 6	Load-Independent Flow Division (closed-center, pressure-flow compensated) 43.5 GPM (164.7 L/min) 2,900 PSI (200 bar) 4 / up to 6	Load-Independent Flow Division (closed-center, pressure-flow compensated) 43.5 GPM (164.7 L/min) 2,900 PSI (200 bar) 4 / up to 6
3-POINT HITCH / DRAWBAR Standard 3 pt. hitch Optional steerable 3 pt. hitch Optional wide swinging drawbar	16,000 lb (7,257 kg), Cat. 3/3N 16,000 lb (7,257 kg), Cat. 3/3N, +/- 8.6" swing Roller type, +/- 32" swing	16,000 lb (7,257 kg), Cat. 3/3N 16,000 lb (7,257 kg), Cat. 3/3N, +/- 8.6" swing Roller type, +/- 32" swing	16,000 lb (7,257 kg), Cat. 3/3N 16,000 lb (7,257 kg), Cat. 3/3N, +/- 8.6" swing Roller type, +/- 32" swing
FUEL CAPACITY Standard (60" to 88" gauge) Wide (80" to 120" gauge) Ultra Wide (120" to 160" gauge) Optional fuel capacity***	118 U.S. gal (446.7 L) 178 U.S. gal (673.8 L) 178 U.S. gal (673.8 L) 208 U.S. gal (787.4 L)	118 U.S. gal (446.7 L) 178 U.S. gal (673.8 L) 178 U.S. gal (673.8 L) 208 U.S. gal (787.4 L)	118 U.S. gal (446.7 L) 178 U.S. gal (673.8 L) 178 U.S. gal (673.8 L) 208 U.S. gal (787.4 L)
DIMENSIONS Wheelbase (in / mm) Overall Width - Wide Gauge (in / mm) Height to Top of Cab (in / mm) Overall Length (in / mm) Drawbar Clearance (in / mm) Approx. Shipping Weight (lbs / kg)	96" (2,438 mm) 133" (3,376 mm) 135.5" (3,444 mm) 233" (5,917 mm) 14.3" (365 mm) 31,075 lb (14,095 kg)	96" (2,438 mm) 133" (3,376 mm) 135.5" (3,444 mm) 233" (5,917 mm) 14.3" (365 mm) 31,075 lb (14,095 kg)	96" (2,438 mm) 133" (3,376 mm) 135.5" (3,444 mm) 233" (5,917 mm) 14.3" (365 mm) 31,075 lb (14,095 kg)

* Manufacturer's estimate Maximum Power at approximately 1800 rpm ** Marsh Mellow® spring is a registered trademark of Firestone Industrial Products Company. *** Not available on all configurations

Standard Equipment

Engine Caterpillar® C9 ACERT® Technology (Tier III)

- Engine Ecology Drain
- Water Separator and Fuel Filter
- Single Fan, Suction Type
- Side-mounted muffler on right-hand corner of cab with integrated exhaust
- Air Inlet Heater
- Primary and secondary air cleaner with Venturi-Type PreCleaner
- Extended Life Coolant
- Inching Control Pedal

Undercarriage

- Chemical Tank Mounting points

Hydraulics

Valve functions include:

- Raise, Lower, & Float Detents
- Automatic raise/lower kick out at full cylinder travel
- Positive float lockout
- Load-sensing, closed-center pressure-compensating, Load Independent Flow Division

Electrical

- One AG Plug and one 12 volt power outlet in cab
- 7-Pin Trailer Connectors

- Two forward-facing Halogen lights, Two side flood lights on beltline, Two flood lights in rear of cab, and two flood lights on rear fender

Operator Environment

- ROPS Cab with sound suppression
- Air Conditioner and Pressurizer
- SurroundFlow™ Heater and Defroster
- Two beverage holders, storage box, floor mat, coat hook, and literature storage
- Cigar lighter and ashtray
- Courtesy lights (inside cab)
- Horn
- Ten Monitor Mounting Bosses
- Radio ready
- Tilt and Telescopic Steering column
- Tinted Glass
- Front Wiper
- Tractor Management Center integrated into right armrest.
- 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

Optional Equipment

Operator Environment

- Deluxe cab
- Deluxe Wipers (additional rear & right side)
- Front Sun Visor
- Set of Four Speakers
- Amplified Subwoofer
- 6-disc CD changer
- Power Pack of additional electrical outlets in cab
- Electric controlled external mirrors

- Automatic Climate control
- Delayed engine shutdown
- Delayed lighting shutdown
- Pre-wiring for 2-way FM radio
- Deluxe Semi-Active Seat with Heated Seat and backrest
- Decelerator pedal
- Remote Radio Controls mounted in steering wheel
- Rear Sun Visor
- Right and left side sun shades
- Accessory Bar for mounting monitors
- Charcoal Cab Filter
- AG Falling Object Protection Plate (FOPS)

Hydraulics

- 5th and 6th hydraulic remote
- Implement case drain
- Power beyond with free-return to sump

Electrical

- Batteries with Disconnect
- Engine Block Heater
- NightBreaker™ High Intensity Discharge Lights, two front-facing, two rear-facing
- Deluxe rear roofline and courtesy lights
- 2 rotating Beacons
- Hydraulic Sump heater
- Radar
- Reverse Alarm
- Auto-Guide Navigation System
- CAT® product link
- ISO 11783 Connector

Other

- Front Weights with bracket
- Idler weights
- Air Compressor
- Additional handrail on inboard side of steps
- Up to 208-gallon fuel capacity (with additional fuel tanks)
- Extra Wide Mirrors
- Fire Extinguisher Bracket
- Anti-Vandalism Package



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.

Visit us at: www.challengerag.com

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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