

Challenger MT900B

Challenger[®] MT900B



We're up to
The Challenge

MT900B SERIES
430 TO 570 ENGINE HP

Performance that breaks all barriers

Leave it to Challenger to break the barriers in the four-wheel-drive tractor market... starting with the title of highest-horsepower articulated tractor available worldwide. Granted, Challenger engineers had a head start with the comparable-sized MT800B track tractors.

However, the MT900B Series is much more than a Challenger track tractor on tires. All four models in the MT900B Series feature state-of-the-art technology, from the rugged bar axles to the heavy fabricated steel frame to the tough and dependable differentials.

Of course, we continue to use the best of the best from the MT800B Series track tractors, including the powerful Caterpillar® ACERT™ technology

diesel engines and the Cat-designed-and-built 16F/4R powershift transmission. You'll also find the same comfortable cab, complete with all the control you'll need to manage big acreage and long hours.

The result is a full line of high-horsepower, articulated four-wheel-drive models that comfortably handle harsh conditions and heavy loads with equal ease.

Model	Gross Engine HP
MT945B	430
MT955B	460
MT965B	510
MT975B	570



Agricultural And Industrial Capabilities

Whether you're pulling an extra-wide chisel in corn stubble or tandem scrapers on a new highway project, an MT900B tractor is the best machine for the job. In fact, with their long list of equipment options, MT900B Series tractors are finding applications in new fields every day.

Among the scraper and industrial options designed for special use are:

- Special scraper hitch plate capable of withstanding up to 18,000 lbs. of vertical load.
- Tow cable
- Power train bottom guards
- Vandalism package with lockable fluid caps
- Falling object protection plate
- Engine compartment bottom guards
- Reverse alarm

Of course, many of the standard features on the MT900B work to the benefit of contractors and farmers alike. Take for example the 42% torque rise across all models, which helps pull you through when the blade on a nearly full scraper digs into a vein of clay. And consider Challenger's innovative Load Independent Flow Division (LIFD), which ensures proportional oil flow to all circuits when the system is operating at full capacity.



Moving Forward With New Ideas... And New Products

Since 1986, when Caterpillar® introduced the world's first farm tractor equipped with rubber tracks, the Challenger® name has stood for awesome power, cutting-edge technology and amazing versatility. However, the Challenger name acquired even more significance 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 encompasses a full line of wheel and track tractors from 23 to 570 HP, a high-quality family of hay equipment, and three of the most reliable and most productive combines available anywhere. 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.

PROVEN STRENGTH



We're up to
The Challenge

RAW POWER

Challenger[®]



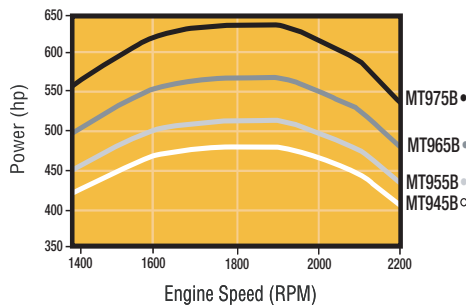
Cat® Engines

stretch the limits on horsepower

Cat® Engines Stretch The Limits On Horsepower

The new Challenger® MT900B Series offers more than just advanced engine horsepower levels. These massive models also boast Caterpillar's innovative ACERT™ technology, which allows their rugged engines to meet all mandated emissions requirements without sacrificing performance, durability or reliability.

The principle behind ACERT™ technology is really quite simple. By offering better control of the combustion process and its core elements — air, fuel and electronics — emissions are minimized and performance improved.



With up to 42% engine torque rise, the Cat® C15 and C18 ACERT™ engines deliver exceptional pulling power in all conditions. Engine power growth up to 8% will have you downshifting a lot less frequently, too.

Model	Engine	Displacement	Gross Engine HP
MT945B	Cat C15 ACERT Tier III	923 in ³ (15.2 L)	430 (320 kW)
MT955B	Cat C15 ACERT Tier III	923 in ³ (15.2 L)	460 (343 kW)
MT965B	Cat C18 ACERT Tier III	1106 in ³ (18.1 L)	510 (381 kW)
MT975B	Cat C18 ACERT Tier III	1106 in ³ (18.1 L)	570 (425 kW)

ADEM 4 Electronics

As an integral part of the Intellitratics™ network, the Advanced Diesel Engine Management (ADEM 4) electronics control system enables smooth power delivery by coordinating communication between all tractor electronic control modules.

In effect, the ADEM 4 ECM system analyzes engine performance hundreds of time per second to fine tune fuel-air ratios. However, the highly efficient fuel system also allows for multiple injections during each combustion cycle. Small amounts of fuel are injected at precise times to achieve the combined goals of fuel economy and lower emissions.

- An advanced air system provides more cool air in the combustion chamber by automatically monitoring engine parameters and then adjusting fuel-air ratios to meet various loads and speeds.

- The engine offers improved response at reduced noise levels.
- ACERT™ technology enables the engine to maintain power, even with changing fuel temperatures.
- The patented Hydraulic Electric Unit Injector (HEUI) fuel delivery system improves tractor performance across the entire operating range. By tailoring fuel injection rates to operating conditions, noise and emission levels are lowered, fuel economy is improved and higher injection pressures are achieved.
- The four-valve, cross-flow cylinder head design optimizes combustion through improved flow of cool air into and exhaust out of the combustion chamber.
- High-strength, wet cylinder liners improve fuel consumption and lower emissions, while reducing the cost and time constraints of engine repairs and overhauls.



The MT945B and MT955B models feature a Cat C15 ACERT diesel with 15.2 liter (928-cu.-in) displacement, while the MT965B and MT975B models boast a massive 18.1-liter (1,105-cu.-in.) Cat C18 ACERT diesel—the largest displacement agricultural tractor engine on the market.

- Pistons are a two-piece design, with a steel crown, for strength, and aluminum skirt for less weight and tighter clearance to reduce piston slap.
- A direct drive fan provides economical, efficient engine cooling.
- Mid-support of the cylinder liners decreases vibration, which, in turn, reduces engine noise and wear on the cylinders and cylinder liners.
- An optional air compressor, with 120 PSI (827 kPa) powers pneumatic tools, cleans out sprayer nozzles and inflates tires, making quick repairs in the field even easier.

PRODUCTIVE



Cat Powershift transmission

Shift To Greater Productivity

You don't put just any transmission behind a 570-horsepower powerplant. It takes a rugged transmission that's enclosed in a heavy-duty cast-iron housing. And it requires high-capacity bearings and shafts that are designed for long-term durability.

The first of its type in the industry, the Caterpillar built 16F X 4R electronically controlled powershift features nine individual clutch packs made up of seven rotating and two stationary clutches. Consequently, each of the 16F/4R gears is engaged when a combination of one range clutch and one speed clutch is engaged.

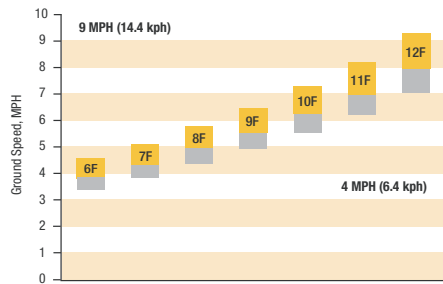
That also means that the tractor will not "freewheel" in any gear. Instead, it maintains constant speed, even on steep slopes, so the operator is always in control.

Tested And Retested

Before it ever went into production, the MT900B Series powertrain was tested on the farm and in the lab to ensure rugged performance and reliability. But that's not enough for Challenger®. Every transmission is individually tested to ensure it meets Challenger specifications before going into an MT900B Series tractor.

Electronic Communication

Up to six on-board computers analyze hundreds of signals per second through the Challenger Intellitratics™ network to provide maximum flexibility and performance from the engine and powertrain.



In essence, the electronic transmission control and the ACERT™ electronic engine control system work together to minimize shifting harshness and improve shift quality at any operating temperature, under all load conditions.

Numerous Shifting Options

Working in partnership with the Intellitratics™ network, the various electronic controls in the drivetrain allow the operator to choose from six different shifting modes when making manual shifts.

Shuttle Shifting – Quickly change direction of travel without the need to use the inching pedal or to come to a complete stop before shifting between forward and reverse or vice versa.

Programmable Shifting – Enables the operator to select the desired reverse or forward gear the tractor will shift to when shuttling between forward and reverse.

Continuous Shifting – Provides smooth continuous shifts in either forward or reverse for as long as the operator holds the upshift or downshift button.

Sequential (Pulse) Shifting – With each push of the upshift or downshift button, the tractor responds with a single shift.

Pre-Select Shifting – Pre-program any forward gear between 1 and 10, using the TMC, as the default starting gear. Once set, it remains in the memory, even after power down. On the other hand, the transmission will automatically downshift if it senses too much clutch slip in the selected gear.

Speed Matching – Controllers on the tractor evaluate the current ground speed and engine speed, then select the transmission gear that most closely matches both when the inching pedal is depressed.

Built For The Field

Eight gears in the popular 4 to 9.3 mph (6.5 to 14.9 kph) 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.

One-Touch™ Multi-Shifting

While it functions as a headland management system, the One-Touch™ management system also allows the operator to make multiple gear-shifts at the push of a button. In “shift” mode, the One-Touch™ rocker switch allows the operator to up or downshift a pre-selected 1, 2, 3 or 4 gears at a time. Exclusive to Challenger®, the system remembers only the number of gears you wish 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 or scraper, demand maximum power to keep the tool at the proper working depth and keep you moving for top productivity. Maximum Output mode assists by automatically shifting to keep the engine in the peak power range where horsepower is maximized.

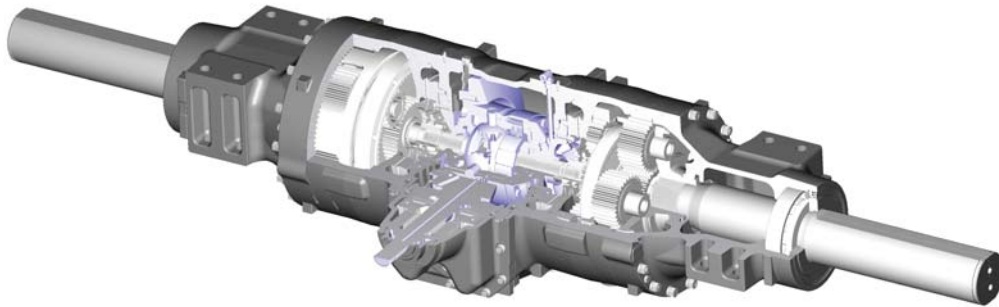
Constant Engine Speed

To optimize efficiency when operating a PTO-driven implement, you want to maintain a constant PTO rpm throughout the field. Constant Engine Speed mode makes this easy by maintaining a preset engine speed.

Constant Ground Speed

Speed-sensitive operations are effortless using the Constant Ground Speed mode. Like the cruise control on your automobile, it achieves a preset ground speed by varying the engine speed. However, Constant Ground Speed will also make automatic downshifts under high load conditions to prevent engine stall. Once the load reduces, Power Management automatically up-shifts to return to the desired ground speed.

Industry-Leading strength and durability



Imagine farming 100 years ago using a draft horse with sore feet. There's simply no way you're going to get the most out of the animal. It's not any different today when you use a tractor that can't effectively put the power to the ground.

That's why Challenger engineers incorporated the strongest, most advanced components available into the MT900B Series drive system.

It takes a rugged frame to harness up to 570 horsepower and nearly 30 tons of steel. But it takes an even stronger articulation joint to hold it all together and provide the maneuverability you demand for tight turns. Challenger delivers on all counts.

We started with the widest, heaviest frame in the industry to serve as the foundation for performance. The front portion features Challenger's proven cast and C-channel frame to support the engine and transmission, while

the rear section is formed with high-strength fabricated steel plate.

Tri-Point Articulation

From its inception, the MT900B Series was designed for excellent maneuverability and a comfortable ride in the field. It starts with a 42-degree turn angle for tight maneuvers on headlands and corners. Just as important, though, is the 13-degrees of oscillation that ensures even distribution of weight and power on uneven terrain. At the same time, it provides even distribution of forces through the frame of the tractor, for less component stress and greater reliability.

Massive Components

Bigger truly is better when horsepower is involved. That's why the MT900B Series uses the largest pin in the industry to anchor the articulation joint.

For added reliability and load capacity, all spherical bearings are sealed and maintenance free.

Oversized Axles

Manufactured by Challenger to exacting standards, the 145-millimeter bar axles used on the MT900B Series are the largest in the industry. As if that weren't enough, an extra-large axle housing provides the structural support to withstand heavy loads and rough terrain.

For even more reliability, both axles are pressure lubed from the transmission sump to reduce friction and power loss while ensuring constant wear protection.

Meanwhile, dual internal wet disc brakes on each axle provide impressive stopping power to restrain heavy loads, even in difficult terrain.

Rugged Final Drives

From the rugged Cat transmission, speed and horsepower are routed directly to the front and rear differentials for minimal loss of horsepower. At that point, precision-ground gear sets ensure quiet and reliable power transfer to the axles, where dual inboard planetary final drives reduce power loss and provide added strength.

An optional electro-hydraulic differential lock on each axle further guarantees that maximum power is available when it is needed most.





VERBODEN

We're up to
The Challenge

GENTLE GIANT



Firm Footing for any application



Industry-Leading Tire Options

Working in cooperation with Michelin, Challenger boasts the industry's first North American application of Michelin's new Axiobib tire with Ultraflex Technology. With 615 peak engine horsepower, you need a tire that can effectively harness that energy into usable pulling power. By reinforcing the tire sidewall and allowing up to 20% greater flex than a standard radial tire, the Axiobib tire provides a significantly larger footprint, which gives maximum traction and flotation.

Singles, Duals or Triples

Take your choice of single, dual or triple tire configurations on all models to match your individual application and farming program. No matter the choice, you can be assured of maximum traction and minimal compaction.

In a triple configuration, Michelin's Agribib tires provide a generous footprint for reduced compaction and a unique lug design that promotes excellent self-cleaning capabilities. The deep lug design offers maximum traction and maintains that feature through a longer tire life.

The MachXBib tire in all dual tire configurations offers a large footprint, as well as the ability to carry the load at low air pressures. This

combination promotes flotation and reduces rutting in heavy draft applications.

Meanwhile, an 18-bolt hub ensures that the hubs and wheels stay locked together in high torque applications. This design increases clamping forces and reduces loads on the individual components.

Balance The Load With Ballast

Proper ballasting is essential for peak performance. That's why Challenger offers everything you need to balance the load for maximum traction and fuel efficiency. A maximum operating weight of 60,000 lbs (27,216 kg) on the largest models means that the power and the tractor are staying on the ground. Options to reach this weight include a full rack of suitcase weights on the front, as well as wheel weights for both axles for optimum weight balance. Due to the built-in weight of the heavy-duty frame, additional frame weights are not required, which means they won't be blocking visibility.

Equipped with the correct amount of ballast and the appropriate tires at the recommended inflation pressure, the MT900B can be as light and agile on its feet as any tractor on the farm, ensuring peak performance and reduced compaction.

The New Benchmark

in hydraulic power



Challenger® MT900B Series are as big on hydraulic power as they are on raw horsepower, meeting not only today's demanding standards, but those expected in the future. Standard flow from the load-sensing, closed-center pressure compensating system is 43.5 gpm (164.7 lpm). The optional flow is 59 gpm (223 lpm) at up to 2,900 psi (200 bar) pressure.

Standard amenities on all models include four remote electric over hydraulic circuits. However, the capabilities can be expanded even further with up to six hydraulic remotes. Challenger also offers two case drain options and power beyond functions to match any operation.

Dial In Flow And Pressure

Remote implement hydraulics are precisely controlled through the Intellitronics™ network. Using the Tractor Management Center (TMC), the operator can feather in flow changes on the go, adjust timed detents and individually adjust valve operation.

Fingertip Control

Up to five in-line electronic remote hydraulic fingertip levers are sized and positioned for intuitive operation and fingertip control. An additional fingertip lever, located just behind the hand rest on the console, controls the optional sixth implement remote valve.

Load Independent Flow Division

Exclusive to Challenger, Load Independent Flow Division (LIFD) is an indispensable feature when using hydraulic-powered equipment. In simple terms, 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 vacuum system is critical.

Instead of diverting hydraulic flow from one job to another when pump capacity is exceeded, 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

Hitch design isn't something to be taken lightly on an articulated, four-wheel-drive tractor. Fortunately, balance and load-carrying requirements were carefully examined and integrated into the MT900B Series design process. Challenger® engineers also examined typical applications and operator preferences.

As a result, the MT900B Series offers a standard swinging drawbar, as well as an optional 3-point hitch.

Forward-Attached Drawbar

When you're pulling a load that requires 400 to 600 engine horsepower, you can't afford to have a weak point at the hitch. That's why the drawbar on the MT900B Series extends nearly to the center of the tractor.

By pulling from near the center of the wheelbase, the industry leading engine power of the MT900B is more efficiently transferred to usable drawbar horsepower.

Thicker and wider than the average hitch, the drawbar can also swing nine degrees from the tractor centerline when unpinned. Rubber bumpers and wear plates are standard to cushion shock loads and ensure long life. A trigger hitch pin is standard, too, making one-person implement hook-up simple and convenient.

3-Point Hitch

It takes a massive 3-point hitch to handle the loads that are sure to be encountered behind the MT900B. Fortunately, Challenger has answered the call with their Category 3/4N and Category 4 3-point hitches. This robust design offers 19,500 lbs. (8,845 kg) of lift to handle all of the largest mounted implements. With draft and slip sensors, the 3-point hitch will automatically adjust to changing field conditions to keep you running even in the toughest situations.

Special-Application Hitch

Challenger MT900B Series tractors weren't designed for field applications alone. They're equally adept at pulling scrapers, leveling land and building terraces. Consequently, all four special application models include a scraper hitch plate capable of withstanding up to 18,000 lbs. (8,165 kg) of vertical load. This allows you the option of attaching the appropriate hitch for your particular scraper, or utilizing a drawbar hitch for pulling water wagons, tandem discs, etc.

Deluxe Cab Option

Although the standard cab can be equipped with a number of options, a majority of them, including a few that aren't available separately, are wrapped into package when you order the deluxe cab. Among its extra features are:

- Deluxe wipers, including rear and right side.
- Front sun visor.
- Batteries disconnect.
- Set of four speakers.
- Power pack of additional electrical outlets.
- Delayed engine and light shutdown.
- Pre-wiring for FM/2-way radio.

Top-Of-The-Line comfort and control



When you're in command of a machine the size of the new 570-horsepower Model MT975B you wouldn't... or shouldn't... expect anything less in the cab. Designed by ergonomic specialists, with the help of farmers like you, the MT900B cab offers more comfort and control than ever imagined.

Like the tractor itself, it also boasts an impressive size. Stretch out in 108 cubic feet (3.06 m³) of luxury. The MT900B Series cab is quieter, too, for a new level of solace that helps you work longer hours with less fatigue.

Spend Your Day On A Cushion of Air

The standard air-suspension operator's seat with seat belt is designed to support the driver in complete comfort, thanks to plenty of adjustment.

- Seat height and suspension
- Fore and aft seat position (6"/152 mm)
- Lumbar support
- Seat back tilt position (110° range)
- Horizontal and lateral isolation +/- 1" (+/-23 mm)
- Swivel control (25° right and 10° left)
- Optional leather package: operator seat, instructor seat and left armrest

Deluxe Vibration Reduction Seat (VRS)

For the ultimate in operator comfort, upgrade to the optional VRS, heated operator seat that's backed by innovative computer technology. 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.

Adjust To Any Weather

The Surround-Flow™ ventilation system, with 12 vents strategically located throughout the cab, keeps you truly comfortable and more productive regardless of the season. 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. You can even let the tractor do all the work for you with the optional Automatic Climate Control system.

Comfort Features Throughout

A comfortable ride is just the beginning of the comfort features you'll find in the MT900B Series' spacious cab. Take a seat and look around at some of the other amenities.



COMFORT

The slim-profile dash contributes to maximum forward ground visibility and provides analog and LCD displays for all major tractor and engine functions.

A textured steering wheel for optimum grip and superior comfort.

Ergonomically designed right-hand Tractor Management Center (TMC) with controls organized by function.

Tilt and telescopic steering column.

Additional storage includes a coat hook, an operator's manual storage area and a compartment beneath the instructional seat.

Leather package available (covers operator seats, instructor seat, and left armrest)

A large temperature-controlled storage compartment keeps your lunch cool or warm.

We're up to
The Challenge 15



Top Manager in its field

Challenger's unique Tractor Management Center (TMC) does everything the name implies. Using the Intellitronics network, this state-of-the-art center puts you in command with intuitive controls and at-a-glance performance information... all within easy reach of your right hand for fingertip control. Most importantly, the TMC console moves with the seat so you're never searching for a control.

Information Means Productivity

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, so you can fine-tune tractor operations as needed for the job. 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™ Control

The One-Touch™ management system allows the operator to perform a number of different 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, accelerating or decelerating the engine, raising and lowering the 3-point hitch, engaging and disengaging the PTO and raising and lowering an implement.

Both "Work" and "Raise" sequences can be recorded to further simplify your application and eliminate possible errors due to fatigue.



Rotary Dial Function Descriptors

(CLOCKWISE FROM 12 O'CLOCK):

- Summary screen
- Performance monitor
- Fuel consumption
- Efficiency
- Information
- Service screens
- Events Set-up
- Guidance
- One-Touch™ Power Management
- PTO
- 3-point hitch
- Hydraulics 4-6
- Hydraulics 1-3

Tractor Management Control

- 3-Point Hitch Raise/Work Switch
- One-Touch™ Rocker Switch
- Gear Selection Buttons
- Power Management Button
- Transmission Control Lever
- Throttle Lever
- TMC Display
- Hydraulic Levers 1-5
- Function Selector
- Adjustment Knob
- Enter Key
- Tab Left/Right Keys
- 3-Point Hitch Depth Control Lever
- Rounding Lock-out Switch
- Hydraulic Lever 6
- PTO Switch
- Electronic Mirror Control (Optional)
- Electro-Hydraulic Differential Lock





Function Selector

Enter Key

Tab Left/Right Keys

3-Point Hitch Depth Control Lever (Optional)

Adjustment Knob

PTO Control (Optional)

Electronic Mirror Control

Hydraulic Lever 6 (Optional)

Roading Lock-out Switch

Electro-Hydraulic Differential Lock (Optional)

Auto-Guide Switch (Optional)

Auto-Guide™ offers serious navigation

The optional Auto-Guide™ satellite navigation system brings a level of control and productivity to agriculture that wasn't even imagined 50 years ago. Using cutting-edge GPS-based technology, Auto-Guide steers the tractor, without operator input, along parallel swaths through the field at higher rates of speed and accuracy... pass after pass.

Imagine the benefits and payback potential—less fatigue and exhaustion; increased operation speeds, particularly at night or in low-visibility conditions; fewer skips and overlaps; less seed and chemical waste, and greater productivity.

The flexibility to perform precision applications like bedding, planting and tillage are already built into the Auto-Guide™ satellite navigation system. Moreover, the system is fully integrated into the Intellitracs network and can be engaged using the One-Touch function. All you have to do is select the system that best matches your needs and accuracy level goals.

You don't have to worry about the future, either. Should your needs change, you can upgrade your system and DGPS signal source, for increased accuracy levels, without replacing major portions of the system.

- Sub-Meter System – +/- 10" (254 mm) dynamic accuracy for decreasing overlap and skips.
- Decimeter System – +/- 2-4" (51 - 102 mm) 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" (25 mm) dynamic accuracy for operations that require higher levels of exactness, such as cultivation, band spraying, zone 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. If the Auto-Guide™ switch is pressed, a yellow indicator light will illuminate to indicate that the system is engaged. It's that simple. Naturally, Auto-Guide™ is disengaged as soon as you manually turn the wheel, whether it's at the end row or the middle of the field.



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SUPERIOR



A Clear View, at any hour, in any weather



From its lofty position, the MT900B Series cab already provides a commanding 360-degree view of field—thanks, in part, to 67.5 square feet (6.2 m²) of usable glass area and a large, curved windshield. However, knowing that visibility and access to the cab can play a role in the amount of fatigue you experience, Challenger engineers took comfort and convenience to the next level. That's why Challenger cabs offers more than you might expect, both inside and out.

Don't Worry About The Nightshift

Efficiency and productivity don't have to suffer when the sun goes down. The MT900B Series helps you make the most of long days with a full bank of work lights, including two halogen headlamps, two side floodlights, two floodlights in the rear of the cab and

two floodlights on the rear fenders. For road travel, in addition to the headlamps there are taillamps and flashing warning and extremity lamps which also function as turn indicators. Up to two rotating beacons are also available.

Take Field Lighting To A New Level

For even better nighttime performance, consider Challenger's industry-leading Nightbreaker™ HID lighting package. This valuable option replaces 10 of the halogen lights on the deluxe lighting package (4 on the front and 6 on the rear) with HID Xenon lights that provide up to 30% greater nighttime illumination. That's enough to push night-time lighting out to a quarter mile, depending on weather conditions. The increase in the amount of pure white light is also easier on the eyes.

Add The Accessories

An optional accessory bar provides a mounting location for several monitors without hindering the view to the implement or the operator's access to controls. Two auxiliary electrical circuits (one 3-pin ag plug and one 12-volt outlet) provide power. The Power Pack™ option features two additional 3-pin connectors, a terminal strip and rocker switches to attach and control multiple electronic options.

Interior And Exterior Mirrors

Although the seat swivels, so you can turn and view even the widest tillage equipment, it's not always necessary, thanks to the large side mirrors and a wide-angle inside mirror. All tractors feature electronic remote-controlled mirrors that are heated to provide a clear view in all weather conditions.



Challenger® MT900B Series tractors offer maximum visibility in any weather, thanks to a revolutionary full-coverage, parallel-swath wiper blade. Optional side and rear wipers improve visibility to implements and the hitch during rainy or inclement weather.

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

Optional front and rear sun-shade visors help block the sun when at low positions in the sky. As an added option on the MT900B Series, right and left side sun shades are also available.

The side posts in the ROPS cab are placed in-line with your shoulders for an unobstructed view of wide, trailed implements.



We're up to
The Challenge



Challenger Tractors

keep you rolling

Challenger® MT900B tractors were designed not just for performance, but for fast, easy service. That means less time out of your hectic schedule to perform general maintenance and more time working in the field. With five easy-to-access daily service points, maintenance inspections become more of a daily routine than a time-consuming chore.

- The tilt-up hood raises from the front, providing excellent access to key service points.
- The dual-element air cleaner slides out for easy inspection and replacement.
- The engine oil is easily checked and topped off from ground level on the left side of the tractor.
- All service points are easily accessible without having to articulate the tractor. A heavy-duty articulation lock bar provides an added stabilizing measure if maintenance in the area is required.
- Easy-to-view sight gauges on the transmission and hydraulic reservoirs provides a quick check of the oil levels.
- No tools are required to gain access to the cooling cores to remove trash build-up or blockage.
- 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.
- Four 12-volt, 1,000 CCA maintenance-free batteries are located directly under the hood, in front of the radiator. An optional battery disconnect is available for cutting off electrical power to the tractor.

Service Interval Tracking

The innovative, on-board TMC system automatically 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

Fuel stops will be a lot less frequent, thanks to the efficiency of the Cat® ACERT™ engines and a large, 390-gallon (1476 L) fuel tank. The single-point fuel fill is easily accessible from the

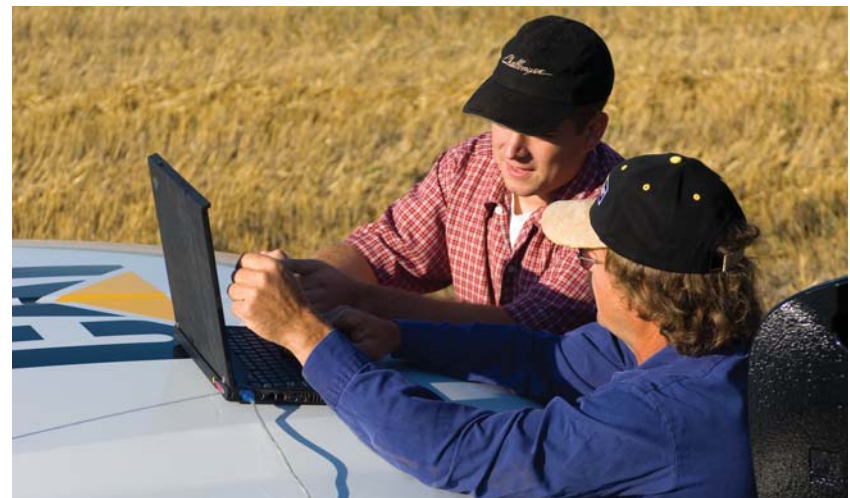
rear access ladder for quick refueling in the yard or the field.

Serious Dealers, Superior Service

When you're racing against time to get fields prepared, crops in the ground or fall tillage completed before snowfall, you need a dealer you can rely on. Fortunately, every Challenger® purchase includes 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.

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



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

DEPENDABLE



We're up to
The Challenge



Every Challenger Purchase

comes with world-class commitment

When you purchase a Challenger® MT900B, or any other Challenger model, you're buying a lot more than a piece of machinery. You're purchasing the Challenger commitment to quality and service.

If you haven't already done so, take a close look at the new MT900B Series at your local Cat® dealership. You'll discover that it's built to the highest standards of quality in terms of components and construction, as well as fit and finish.

But Challenger's commitment to the customer goes far beyond steel and rubber. Consider just some of the benefits of being a Challenger customer.

Challenger Financing

At AGCO 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.

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, Challenger 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.

Higher Resale Value

For nearly 20 years, Challenger 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 MT900B Series, like its rugged Cat powershift and the Tier 3 Caterpillar ACERT™ engine—along with its long-term Cat dealer support—you shouldn't expect anything less from Challenger's new four-wheel-drive 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.

Standard Equipment

Engine Caterpillar® C15 & C18 ACERT® Technology (Tier III)

- Engine ecology drain
- Water separator and fuel filter
- Single fan, suction type
- Integrated muffler/exhaust, side-mounted on right hand corner of cab
- Ether starting aid
- Primary and secondary air cleaner with Venturi-Type precleaner
- Extended life coolant
- Inching control pedal

Hydraulics

Valve functions include:

- Raise, lower, & float detents
- Automatic raise/lower kick out at full cylinder travel
- Positive float lockout

Electrical

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

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/telescopic steering
- 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
- Instructor seat w/seatbelt
- Toolbox
- Electric heated mirrors

Optional Equipment

Operator Environment

- Deluxe cab with auto climate control
- Deluxe VRS seat
- Deluxe wipers
- Right and left side sunshades
- Set of four speakers
- Amplified subwoofer
- Additional electrical outlets
- 2-way FM radio pre-wiring
- Accessory mounting bar
- Charcoal cab filter
- AG Falling object protection Plate (FOPS)
- Decelerator pedal
- Delayed engine/lighting shutdown

Hydraulics

- Implement case drain
- Power beyond with free-return

Electrical

- Hydraulic sump heater
 - Deluxe rear roofline and courtesy lights
 - Nightbreaker™ HID lights
 - 2 rotating beacons
 - Radar
 - Reverse alarm
 - Battery disconnect
 - ISO 11783 connector
- ### Other
- Auto-Guide Navigation System
 - Cat® product link
 - Front weights
 - Air compressor
 - Extra wide mirrors
 - Fire extinguisher bracket
 - Anti-vandalism package

	MT945B	MT955B	MT965B	MT975B
ENGINE	Caterpillar® C15 ACERT™ Tier III	Caterpillar® C15 ACERT™ Tier III	Caterpillar® C18 ACERT™ Tier III	Caterpillar® C18 ACERT™ Tier III
Gross Engine Power - HP (kW)	430 (320)	460 (343)	510 (381)	570 (425)
PTO HP @ rated 2100 RPM	360	385	425	425
Engine Power Growth @ 1800 RPM	8%	8%	8%	8%
Peak Engine HP (kW)	464 (346)	496 (370)	550 (410)	615 (459)
Engine Torque Rise @ rpm	42%@1400	42%@1400	42%@1400	42%@1400
# Cylinders / # Valves	6 / 24	6 / 24	6 / 24	6 / 24
Displacement - cubic in. (L)	923 (15.2 L)	923 (15.2 L)	1106 (18.1 L)	1106 (18.1 L)
Aspiration	Turbocharged / Air-to-Air Aftercooled	Turbocharged / Air-to-Air Aftercooled	Turbocharged / Air-to-Air Aftercooled	Turbocharged / Air-to-Air Aftercooled
FUEL SYSTEM	MEUI - ADEM 4 Full Electronic Control	MEUI - ADEM 4 Full Electronic Control	MEUI - ADEM 4 Full Electronic Control	MEUI - ADEM 4 Full Electronic Control
Fuel Tank Capacity - US gal. (L)	390 (1476)	390 (1476)	390 (1476)	390 (1476)
TRANSMISSION	Caterpillar® Powershift 16F / 4R	Caterpillar® Powershift 16F / 4R	Caterpillar® Powershift 16F / 4R	Caterpillar® Powershift 16F / 4R
Maximum Speed - mph (kph)	24.6 (39.6)	24.6 (39.6)	24.6 (39.6)	24.6 (39.6)
INDEPENDENT PTO	1000 RPM 20-spline 1.75" (45 mm)	1000 RPM 20-spline 1.75" (45 mm)	1000 RPM 20-spline 1.75" (45 mm)	1000 RPM 20-spline 1.75" (45 mm)
(Optional)	Electronic Control	Electronic Control	Electronic Control	Electronic Control
ELECTRICAL SYSTEM				
Alternator	185 amp	185 amp	185 amp	185 amp
Batteries	(4) 1,000 cca 12 V	(4) 1,000 cca 12 V	(4) 1,000 cca 12 V	(4) 1,000 cca 12 V
HYDRAULIC SYSTEM				
Type of System	Load Independent Flow Division (Closed-Center, Pressure-Flow Compensated)	Load Independent Flow Division (Closed-Center, Pressure-Flow Compensated)	Load Independent Flow Division (Closed-Center, Pressure-Flow Compensated)	Load Independent Flow Division (Closed-Center, Pressure-Flow Compensated)
Standard Flow - gpm (L/min)	43.5 (164.7)	43.5 (164.7)	43.5 (164.7)	43.5 (164.7)
Optional Flow - gpm (L/min)	59 (224.2)	59 (224.2)	59 (224.2)	59 (224.2)
Hydraulic Remotes	4 Standard / up to 6 Optional	4 Standard / up to 6 Optional	4 Standard / up to 6 Optional	4 Standard / up to 6 Optional
Maximum System Pressure - psi (bar)	2900 (200)	2900 (200)	2900 (200)	2900 (200)
High Flow Valves	4 or 6	4 or 6	4 or 6	4 or 6
(Special Application Only)	Factory or Field Installed	Factory or Field Installed	Factory or Field Installed	Factory or Field Installed
STEERING	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Optional System	Electro-hydraulic	Electro-hydraulic	Electro-hydraulic	Electro-hydraulic
Turning Angle	42°	42°	42°	42°
Oscillation Angle	13°	13°	13°	13°
Centerline Turning Radius - ft. (m)	16 (4.8)	16 (4.8)	16 (4.8)	16 (4.8)
AXLES & FINAL DRIVE				
Manufacturer	GIMA	GIMA	GIMA	GIMA
Final Drive	Inboard Compound Planetary	Inboard Compound Planetary	Inboard Compound Planetary	Inboard Compound Planetary
Bar Diameter - in. (mm)	5.7 (145)	5.7 (145)	5.7 (145)	5.7 (145)
Standard Tires	710/70R42 Duals	710/70R42 Duals	800/70R38 Duals	800/70R38 Duals
Service Brakes	Wet Disk in Axle	Wet Disk in Axle	Wet Disk in Axle	Wet Disk in Axle
- (Front & Rear Axle)				
Differential Lock (Optional)	Electro hydraulic wet disc	Electro hydraulic wet disc	Electro hydraulic wet disc	Electro hydraulic wet disc
- (Front & Rear Axle)				
DRAWBAR / 3-POINT HITCH				
Vertical Load Rating - lbs. (kg)	10000 (4535)	10000 (4535)	10000 (4535)	10000 (4535)
Hitch pin dia. - in. (mm)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)
Special Application Hitch Plate	Optional	Optional	Optional	Optional
- Vertical Load Rating - lbs. (kg)	18,000 (8164)	18,000 (8164)	18,000 (8164)	18,000 (8164)
3-Point Hitch (Optional)	Cat 3/4N or 4	Cat 3/4N or 4	Cat 3/4N or 4	Cat 3/4N or 4
3-Point Hitch Lift Capacity - lbs. (kg)	19,500 (8845)	19,500 (8845)	19,500 (8845)	19,500 (8845)
DIMENSIONS				
Wheelbase - in. (mm)	155.5 (3949.7)	155.5 (3949.7)	155.5 (3949.7)	155.5 (3949.7)
Overall Width w/ Standard Tires - in. (mm)	192 (4871)	192 (4871)	200 (5077)	200 (5077)
Overall Length - in. (mm)	298 (7569.2)	298 (7569.2)	298 (7569.2)	298 (7569.2)
Overall Height to Top of Cab - in. (mm)	151 (3835.4)	151 (3835.4)	151 (3835.4)	151 (3835.4)
Approx. Shipping Weight - lbs. (kg)	39,266 (17,810)	39,266 (17,810)	39,767 (18,038)	39,767 (18,038)
Maximum Operating Weight - lbs. (kg)	50000 (22,680)	54000 (24,494)	60000 (27,215)	60000 (27,215)

*Shipping weight is with pressed steel, single inner 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.

Visit us at: www.challengerag.com



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