Challenger MT800B

We’re up to The Challenge

MT800B SERIES
350 TO 570 HP
When the Caterpillar Tractor Company introduced the Model "Ten," with 15 drawbar horsepower, back in 1928, surely no one dreamed of a rubber-track farm tractor 30 times more powerful. Designed specifically for farmers who faced challenging conditions, the “Ten” featured steel tracks, for better flotation and traction, and a 143-cubic-inch, four-cylinder gasoline engine.

Today, Challenger® tractors set a new benchmark in the industry with the new MT800B Series and a new “king-of-the-hill” Model MT875B. Equipped with a Cat® C18 ACERT™ Technology diesel engine, this newest model in the series boasts 570 gross engine horsepower, once again placing it in the lead among modern-day, high-horsepower 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.

Best of all, they’re sold, serviced and backed by the legendary network of Caterpillar® dealers.

Status Quo is for Everyone Else

It only takes a glance back in history to understand why Challenger MT800B Series track tractors are the leaders in their power class. Some things never change!

Take comfort, for example. Back in the 1920s when most tractors had a steel, pan-style operator’s seat, Cat featured a padded bench seat and backrest. Check out the MT800B cab and you’ll discover that the emphasis on comfort and control hasn’t wavered.

The same goes for power. In 1931 Cat dealers introduced the world’s first production diesel track tractor. Today, when most tractor companies are resorting to exhaust gas recirculation (EGR) to meet off-road emissions standards, Challenger has stepped up to the next level with a new Caterpillar ACERT® Technology Tier III engine.

Among the many benefits of ACERT Technology 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 percent of the world’s commodity production.

Agricultural or Special Application Tractor?

The honest answer to that frequently asked question is, ‘Both’. With its long list of equipment options, an MT800B Series tractor can be set up as a rugged production ag tractor, or a special applications tractor suitable for the most demanding scraper applications.

Among the standard and optional features designed for “scraper” use are:
- Special scraper hitch plate capable of withstanding up to 20,000 lbs. of vertical load
- Roller frame restraint
- Tow cable
- Power train bottom guards
- Vandalism package with lockable fluid caps
- AG Failing object protection plate
- Engine compartment bottom guards
- Reverse alarm
- 59-gallon hydraulic pump
- Hydraulic trailer brakes

For nearly a century, Cat powered tractors have been providing power and productivity on the world’s most demanding and challenging projects. Whether it was the Alaska Highway, a Pacific island runway during World War II or the Hoover Dam, Cat was on the scene from start to finish. These days, Challenger tractors are doing the same on North America’s most productive farms.

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, in addition to track tractors from 260 to 570 horsepower, the Challenger brand encompasses a full line of wheel tractors from 23 to 240 hp, a high-quality family of hay equipment, and 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
“I’ll take all the horsepower you can give me. I just don’t want it in a bigger package that’s harder to maneuver.”
ACERT® Technology expands the limits on horsepower

The new Challenger MT800B Series offers more than just advanced engine horsepower levels. These massive models also boast new engines and new science. Featuring the latest ACERT Technology, the Cat engines used in the MT800B Series meet all mandated engine 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, emissions are minimized and performance improved.

<table>
<thead>
<tr>
<th>Model</th>
<th>Engine</th>
<th>Displacement</th>
<th>Gross Engine HP</th>
<th>PTO HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT835B</td>
<td>Cat C15 ACERT</td>
<td>928 in³ (15.2 L)</td>
<td>350 (260 kW)</td>
<td>290 (216 kW)</td>
</tr>
<tr>
<td>MT845B</td>
<td>Cat C15 ACERT</td>
<td>928 in³ (15.2 L)</td>
<td>400 (298 kW)</td>
<td>335 (250 kW)</td>
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<tr>
<td>MT855B</td>
<td>Cat C15 ACERT</td>
<td>928 in³ (15.2 L)</td>
<td>460 (343 kW)</td>
<td>385 (287 kW)</td>
</tr>
<tr>
<td>MT865B</td>
<td>Cat C18 ACERT</td>
<td>1,105 in³ (18.1 L)</td>
<td>510 (380 kW)</td>
<td>425 (316 kW)</td>
</tr>
<tr>
<td>MT875B</td>
<td>Cat C18 ACERT</td>
<td>1,105 in³ (18.1 L)</td>
<td>570 (425 kW)</td>
<td>425 (323 kW)</td>
</tr>
</tbody>
</table>

With up to 42% engine torque rise and 8% power growth, the CAT C18 ACERT Technology engines are setting new drawbar horsepower records.

ADEM™ A4 Electronics

As an integral part of the Intellitronics™ network, the new ADEM A4 electronics control system enables smooth power delivery by coordinating communication between all tractor electronic control modules.

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

- A more efficient fuel system 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.
- Pistons are a two-piece design, with a steel crown, for strength, and aluminum skirt for less weight and tighter clearance.
- ACERT Technology enables the engine to maintain power, even with changing fuel temperatures.
- The engine offers improved response at reduced noise levels.

The patented Mechanical Electric Unit Injector (MEUI) 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.

High-strength, wet cylinder liners improve fuel consumption and lower emissions, while reducing the cost and time constraints of engine repairs and overhauls.

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 116 PSI (800 kPa) powers pneumatic tools, cleans out sprayer nozzles and inflates tires, making quick repairs in the field even easier.

We’re up to The Challenge
Make The 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.

That’s why MT800B Series tractors feature a Cat powertrain built from the ground up specifically for a rubber-belted ag tractor... not one converted from a 4-wheel drive wheeled tractor.

The only one of its type in the industry, the 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.

Tested And Retested
Before it ever went into production, the MT800B Series powertrain was tested on the farm and in the lab to ensure rugged performance and reliability. But that’s not enough for Challenger tractors. Every transmission that travels down the assembly line is individually tested to ensure it meets Challenger specifications before going into an MT800B Series tractor.

Electronic Communication
Six on-board computers analyze hundreds of signals per second through the Challenger Intellitronics network to provide maximum flexibility and performance from the engine and powertrain.

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

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.
Numerous Shifting Options

Working in partnership with the Intellitronics network, the 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 one and seven, using the TMC, as the default starting gear. Once set, it remains in the memory, even after power down. On the other hand, at take off, 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.

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 upshift or downshift by a pre-selected number of gears (Up to 4). 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 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 to keep the tool at the proper working depth and keep you moving for top productivity. Maximum Output mode assists by automatically downshifting when engine RPMs drop below the optimum range, due to the load, and upshifting when the load lessens. As a result, engine speed is maintained 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

Spraying or incorporating chemicals is 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. If power is sufficient for the load, Constant Ground Speed also allows the tractor to upshift and throttle back to maximize fuel economy.

However, the system will still make automatic downshifts under high load conditions to prevent engine stall. Once the load reduces, Power Management automatically upshifts to return to the desired ground speed.

Even the brakes on the MT800B Series set a benchmark standard. Brake performance is preserved with a patented self-adjusting retraction mechanism. As the oil-cooled, multi-disc brakes wear, the brake pistons position themselves to maintain a constant piston travel for increased efficiency.

Speed-Sensitive Steering

Unlike articulated, 4-wheel drive tractors, which share their horsepower class, MT800B Series track tractors alter the travel direction through a steering differential in the transmission. By changing the ratio of the right and left drive systems, in response to the electro-hydraulic speed-sensitive steering system, direction changes are smooth and responsive, regardless of the speed.

That means that at slower speeds, such as actual working speeds utilized in the field, the steering is more sensitive and requires minimal input for direction changes. At higher transport speeds, the steering is less sensitive, which means more steering wheel movement is required to alter direction, so corrections are controlled and predictable.

Upshift

Downshift

Power Management

We’re up to
The Challenge
Undisputed Track Star
the best on earth

For more than 100 years, Caterpillar has been the hands-down, undisputed leader in track technology. It was in 1904 that Benjamin Holt, one of Caterpillar’s founding fathers, first demonstrated his concept for a machine that moved on self-laying tracks. Eighty three years later, Cat introduced the world’s first rubber-tracked farm tractor, designed to challenge the limits of productivity and performance.

Today, at 118.1 inches (3,000 mm), the MT800B Series Mobil-trac™ system wheelbase is first again, as the longest in its power class. Thanks to the long wheelbase and six-axle design, tractor weight is distributed over a greater area for lower ground pressure and more tractive efficiency in most soil conditions.

A True Marsh Mellow™ Ride

Whether you’re on the road or in the field, one of the most appreciated features of the MT800B Series Mobil-trac system is the comfort. Rough terrain can quickly drain operator efficiency and productivity. The Challenger MT800B Series tractors help improve both, starting at the Mobil-trac system.

- The Opti-Ride Suspension cushions every ridge, bump and rut the tractor encounters. High-tech Marsh Mellow springs, constructed of rubber and fabric, minimize shocks to the operator by isolating the hardbar from the chassis of the tractor.
- A robust stabilizer bar enables the left and right undercarriages to move up and down independently, allowing the hardbar to tilt to a 3.1-degree angle and smoothly walk over obstacles in the field.
- Unlike the “hardbottom” design of other track tractors, the Mobil-trac system incorporates four semi-suspended midwheel pairs per side that create 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.

A real-time tension monitor displays the amount of pressure exerted on each belt via the TMC screen. An alarm alerts the operator if tension is too low, or excessive, to lessen the risk of belt damage.

Greater crop clearance under the axles; 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, 61-inch-diameter (1,549 mm) drive, 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 25,000 pounds (111.21 kN) of tension provides optimum belt-to-driver grip without placing stress on the tractor frame. Slight changes can be made without spacers and without detensioning the belt, which makes it much simpler and quicker to change from one application to another.

The lower rolling resistance and longer footprint improve traction and fuel efficiency, while providing more stability and balance in every application you’re likely to encounter.

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

Suspended midwheels contour to the ground giving a smoother ride and improving traction.

Up to 24.6 MPH

Challenger MT800B Series tractors feature the highest transport speed of any track tractor—up to 24.6 mph (39.6 kph)—for quicker moves between fields and more productivity per day.

The 37-inch (940 mm) diameter front idler improves fuel efficiency by reducing rolling resistance. The smooth, rubber-coated surface helps reduce vibration.
"With the price of fuel nowadays, who can afford to lose horsepower on excess wheel slippage? What I need is better traction."
Most Versatile Track Tractor
in the industry

Name the application and you can outfit an MT800B Series tractor to handle the job. Fact is, the Challenger MT800B Series is the most versatile high-horsepower track tractor on the market. Equipped with 30- or 36-inch belts, it’s a mighty tillage titan or scraper tractor. Select the narrow, 18” extreme application belts, though, and the same unit becomes the only high-horsepower track-type ag tractor capable of operating in row crops.

All total, belts are available in four widths and three types, while idlers, midwheels and drivers are available in two different widths to improve belt life and belt-to-driver performance.

Regardless of the belt type, track gauge is easily adjusted, from 90 inches (2,286 mm) to 128 inches (3,251 mm) without spacers, bolts or the need to detension belts.

Fast, Easy Gauge Changes
Pull the track gauge in close for quick maneuverability, or move the tracks to a wider setting for easier turns under load and improved stability. Either way, it takes as little as two hours. Simply loosen the hardbar bearing caps and the axle collet bolts, and support the tractor. Then, using the gauge adjustment tool, adjust the gauge to the desired width. Re-torque the bolts, lower the tractor and you’re ready to go.

Three Types; Four Widths
Challenger MT800B Series tractors offer more than a choice of belt widths to match the job. Challenger tractors also offer three different belt types to match the work conditions and use pattern.

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 three widths, the general ag belt is equipped with 4.5-inch (115 mm) long guide blocks and 2.7-inch (68.5 mm) tall treadbars for dependable traction in a variety of agricultural conditions.

Extreme Application 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 four widths of extreme application belts are equipped with longer, 5.3-inch (135 mm) guide blocks, taller, 3-inch (76 mm) treadbars, an additional layer of steel cables and an extra layer of rubber.

Special Application (Towed Scraper) Belt
Designed for towed scraper applications or other harsh-environment operations, special application belts feature 2.5-inch tall tread bars, which helps reduce treadbar flexing and irregular wear on compacted and unbroken soils.
In addition, the belt carcass on special application belts is thicker, due to two additional layers of rubber added to the inner belt surface.

Matching Wheel Components
Undercarriage midwheels, idlers and drivers are available in “medium” and “wide” widths to maximize the life of each belt option and satisfy the requirements of the job.

The best rolling stock for your farm depends on the belt width, soil types and travel requirements. In wet or adverse 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 suitcase weights on the front, idler weights and a variety of undercarriage weights, depending upon the model.

<table>
<thead>
<tr>
<th>Belt Type</th>
<th>18”</th>
<th>27.5”</th>
<th>30”</th>
<th>36”</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Ag Belt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Extreme Application Belt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Special Application Belt</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The rubber tracks on Challenger MT800B tractors are constructed of rubber compounds that were individually formulated for treadbars, belt carcass and guide blocks... all bonded together in an exclusive manufacturing process.
Challenger MT800B Series tractors 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) at up to 2,900 psi (200 bar) pressure. For even more flow capacity, Challenger offers an optional 59 gpm (223 lpm) pump.

Standard amenities on all models include four, electric-over-hydraulic circuits and a choice of two case drain options—Pioneer or flat-faced couplers—to match your operation. Expand the capabilities even further with up to six hydraulic remotes. Hydraulic remotes are also available with 3/4” (19mm) couplers.

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

Up to five in-line electronic remote hydraulic levers are sized and positioned for intuitive operation and fingertip control. An additional 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.
Hitch Up
to maximum productivity

Hitch design isn’t something to be taken lightly when you’re harnessed to 350... or as much as 570 gross engine horsepower. Fortunately, balance and load-carrying requirements were carefully examined and integrated into the Challenger MT800B Series design process. Our engineers also examined typical applications and operator preferences.

As a result, the MT800B Series offers a standard wide-swinging roller drawbar, as well as an optional controlled drawbar and a steerable 3-point hitch.

Our Standard Hitch Is Anything But Standard

Thicker and wider than the average hitch, the standard drawbar can swing 32 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 hookup simple and convenient.

Take Control Of Drawbar Swing

Thanks to its unique control features, the optional controlled drawbar puts the operator... rather than gravity... in control of hitch position. Use the “manual” mode to adjust the drawbar to the ideal position on sidehills, or “trim” the draft of offset implements.

The “float” position, meanwhile, allows the operator to select the appropriate percentage of damping force for the draft load. This, in turn, helps dampen the swing in each direction during turns or drawbar movement.

Steerable 3-Point Hitch

It takes a special 3-point hitch for a tractor like the MT800B. Fortunately, Challenger has the answer in the exclusive steerable 3-point hitch option. Designed as an integral system, the hitch can work independently of the differential steering system in float mode, or in manual mode to dampen side-to-side movement, or completely lock it in one fixed position. The articulated design not only improves steering performance when turning under load, but also makes it easier to follow field contours with mounted implements. And, with a lift capacity in excess of 19,500-pounds (8,845 kg), you can be assured it will carry the load.

A 1,000 rpm PTO is optional on all MT800B Series models except the MT875B. In addition to a 20-spline, 1 3/4” shaft, it features electronic control through a wet multi-disc clutch and hydraulic actuation for smooth modulation and system protection.
“I don’t use a tractor like this for a half hour to feed cows – it’s more like 10 to 14 hours of field tillage. I want a tractor that will give me enough comfort to go the distance.”

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 endrows.

Make sound system adjustments without taking your hands off the wheel with optional remote radio controls. Mounted on the steering wheel, this unique feature literally puts control of the radio at your fingertips.
Top-Of-The-Line comfort and control

When you’re in command of a machine the size of the new 570-horsepower Model MT875B you wouldn’t... or shouldn’t... expect anything less in the cab. Designed by ergonomic specialists, with the help of farmers like you, the MT800B cab offers more comfort and control than ever imagined.

Like the tractor itself, it also boasts an impressive size -- 108 cubic feet (3.06 m³) of space to be exact. The MT800B 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.

Deluxe, Semi-Active Seat
For the ultimate in operator comfort, upgrade to the semi-active, heated operator seat that’s backed by innovative computer technology. Using a specially tuned damping system, the seat allows for continuous real-time automatic damping force in any one of three positions, based on terrain inputs.

As often as 500 times per second, a computer senses changes in surface and ride conditions. In response, the program sends an electric pulse to the damper. The damper contains a special fluid that changes viscosity when exposed to a magnetic field. The seat continually adjusts the ride firmness to match field terrain and operator preference.

Comfort Features Throughout
A comfortable ride is just the beginning of the comfort features you’ll find in the MT800B 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
- Tilt and telescopic steering column
- A large temperature-controlled storage compartment keeps your lunch cool or warm
- A cell phone holder and outlet are located within easy reach
- Additional storage includes a coat hook, a literature storage area and a compartment beneath the instructional seat

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.

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 up in one big comfort package when you order the deluxe cab. Among its extra features are:

- Deluxe wipers, including rear
- Front sun visor
- Battery disconnect
- Set of four speakers
- 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 FM/2-way radio

Spend your day on a cushion of air
The standard air-suspension operator’s seat is designed to support the driver in complete comfort, thanks to plenty of adjustment.

- Seat height and suspension
- Fore and aft seat position (7”/178 mm)
- Lumbar support
- Seat back tilt position (110° range)
- Horizontal isolation (2”/51 mm travel)
- Swivel control (25° right and 10° left)
Top Manager in its field

The 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, since it's incorporated into the right-hand armrest, 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 transflective 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 or adjusted to further simplify your application and eliminate possible errors due to fatigue.

Rotary Dial Function Descriptors

(CLOCKWISE FROM 12 O’CLOCK)
1. Summary screen
2. Track tension monitor
3. Fuel consumption
4. Efficiency
5. Status screen
6. Service screens
7. Events
8. Set-up
10. One-Touch™
11. Power Management
12. PTO
13. 3-point hitch steering
14. 3-point hitch
15. Hydraulics 4-6
16. 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
- 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
Using cutting-edge GPS-based technology, the optional Auto-Guide satellite navigation system steers the tractor 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 operating 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, spraying and tillage are already built into the Auto-Guide satellite navigation system. Moreover, the system is fully integrated into the Intellitronics 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 levels.

Auto-Guide™ Navigation System offers serious navigation

Imagine the benefits and payback potential—less fatigue and exhaustion; increased operating 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, spraying and tillage are already built into the Auto-Guide satellite navigation system. Moreover, the system is fully integrated into the Intellitronics 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 levels.

You don’t have to worry about the future, either. Should your needs change, you can upgrade your system and correction source, to further increase accuracy levels, without replacing major portions of the system.

- Sub-Meter System -- +/- 8-10” dynamic accuracy for decreasing overlap and skips.
- 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 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. 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’re up to The Challenge
From its lofty position, the MT800B Series cab already provides a commanding view of everything to the front, sides and rear of the machine—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 cab access can play a role in fatigue levels at the end of the day, Challenger engineers took comfort and convenience to the next level, both inside and out.

**Don’t Worry About The Nightshift**

Efficiency and productivity don’t have to suffer when the sun goes down. The MT800B Series helps you make the most of long days with a full bank of work lights. Standard equipment includes two halogen headlamps, two side floodlights on the beltbine, two floodlights in the rear of the cab and two floodlights on the rear fenders. Road travel features include taillights, flashing safety lights and turn signals. Rotating beacons (optional) are also available for increased visibility on the road.

**Take Field Lighting To A New Level**

Operators who do a lot of work at night might want to consider 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 percent greater light output. That’s enough to push nighttime 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 large side mirrors and a wide-angle inside mirror. The deluxe cab also features electronic remote-controlled, heated mirrors to provide a clear view in all weather conditions. Or choose the extra-wide mirrors as an option.
Challenger Tractors
keep you rolling

Challenger MT800B tractors were designed not just for performance, but also 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 air cleaner elements slide 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.
- An easy-to-view sight gauge at the rear of the tractor provides a quick check of the combined hydraulic, transmission, steering, differential and final drive oil levels.
- No tools are required to swing open 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.
- A large toolbox, integrated into the steps for easy access, carries tools up to 24 inches (610 mm) long and offers a total capacity of 150 pounds (68 kg).
- 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 to prevent battery drain during periods of extended storage and for extra vandalism protection.

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 and logged, 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 Technology engines and an extra-large fuel tank. Standard capacity on all models is 305 gallons (1,155 L). An additional 25-gallon (95 L) tank, which is standard on the MT865B and MT875B, and optional on the MT835B, MT845B and MT855B, boosts total capacity to 330 gallons (1,249 L).

Regardless of the tank arrangement, the single-point fuel fill is easily accessible from the entry platform.

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 tractor purchase includes 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.

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.
“Around here, winter doesn’t wait for anybody. If a tractor breaks down before fall tillage is finished, I’m out of luck until April. I need a tractor I can count on.”
Every Challenger Purchase comes with world-class commitment

When you purchase a Challenger MT800B, or any other Challenger model, you’re buying a lot more than a piece of farm machinery. You’re purchasing our commitment to quality and service.

If you haven’t already done so, take a close look at the new MT800B 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 Challenger’s 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 (1 year/1,000 hours on Scraper models), 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 MT800B 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.

Standard Equipment

Engine Caterpillar® CAT® 3116 Technology (Tier III)
- 120 H.P.
- Single fan, horizontal air intake
- Exhaust system: Side mounted, Jumbo
- Automatic engine shutdown
- Additional electrical outlets

Undercarriage
- Chemical tank mounting points
- Hydraulics

Electrical
- One Ag Plug and one 12 volt power outlet in cab
- 7-Pin Trailer Connectors
- 2-way FM radio pre-wiring
- Inching control pedal

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

Optional Equipment

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

Electrical
- Hydraulic sump heater
- Deluxe rear roofline and courtesy lights
- Nightbreaker™ HD lights
- 2 rotating beacons
- Radar
- Reverse alarm
- Battery disconnect
- ISO 11783 connector

Other
- Auto-Guide Navigation System
- Cat® product link
- Idler & front weights
- Undercarriage weights
- Air compressor
- Additional handrail on inboard side of steps
- Extra wide mirrors
- Fire extinguisher bracket
- Anti-vandalism package
**SPECIFICATIONS**

**MODEL**

<table>
<thead>
<tr>
<th>ENGINE</th>
<th>MT835B</th>
<th>MT845B</th>
<th>MT855B</th>
<th>MT865B</th>
<th>MT875B</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTO HP @ rated 2,100 RPM*</td>
<td>290 (216 kW)</td>
<td>335 (249 kW)</td>
<td>385 (287 kW)</td>
<td>425 (316 kW)</td>
<td>425 (316 kW)</td>
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<tr>
<td>Gross Engine HP</td>
<td>350 (261 kW)</td>
<td>400 (299 kW)</td>
<td>460 (343 kW)</td>
<td>510 (381 kW)</td>
<td>570 (425 kW)</td>
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<tr>
<td>Displacement (cu. in. / L)</td>
<td>928 / 15.2</td>
<td>928 / 15.2</td>
<td>928 / 15.2</td>
<td>928 / 15.2</td>
<td>928 / 15.2</td>
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<tr>
<td>Engine Torque Rise</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
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<tr>
<td>Aspiration</td>
<td>Turbocharged and air-to-air aftercooled</td>
<td>Turbocharged and air-to-air aftercooled</td>
<td>Turbocharged and air-to-air aftercooled</td>
<td>Turbocharged and air-to-air aftercooled</td>
<td>Turbocharged and air-to-air aftercooled</td>
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<tr>
<td><strong>FUEL SYSTEM</strong></td>
<td>MEUI - ADEM 4 full electronic control</td>
<td>MEUI - ADEM 4 full electronic control</td>
<td>MEUI - ADEM 4 full electronic control</td>
<td>MEUI - ADEM 4 full electronic control</td>
<td>MEUI - ADEM 4 full electronic control</td>
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<tr>
<td><strong>TRANSMISSION</strong></td>
<td>Cat® Powershift 16F/4R</td>
<td>Cat® Powershift 16F/4R</td>
<td>Cat® Powershift 16F/4R</td>
<td>Cat® Powershift 16F/4R</td>
<td>Cat® Powershift 16F/4R</td>
</tr>
<tr>
<td><strong>DIFFERENTIAL/STEERING</strong></td>
<td>Cat® differential steering</td>
<td>Cat® differential steering</td>
<td>Cat® differential steering</td>
<td>Cat® differential steering</td>
<td>Cat® differential steering</td>
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<tr>
<td><strong>GAUGE OPTIONS</strong></td>
<td>Standard 90&quot; to 128&quot; (2,286-3,251 mm)</td>
<td>Standard 90&quot; to 128&quot; (2,286-3,251 mm)</td>
<td>Standard 90&quot; to 128&quot; (2,286-3,251 mm)</td>
<td>Standard 90&quot; to 128&quot; (2,286-3,251 mm)</td>
<td>Standard 90&quot; to 128&quot; (2,286-3,251 mm)</td>
</tr>
<tr>
<td><strong>GAUGE ADJUSTMENT METHOD</strong></td>
<td>Infinitely adjustable bar axle &amp; smooth hard-bar</td>
<td>Infinitely adjustable bar axle &amp; smooth hard-bar</td>
<td>Infinitely adjustable bar axle &amp; smooth hard-bar</td>
<td>Infinitely adjustable bar axle &amp; smooth hard-bar</td>
<td>Infinitely adjustable bar axle &amp; smooth hard-bar</td>
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<tr>
<td><strong>BELT OPTIONS</strong></td>
<td>General Formal Ag</td>
<td>General Formal Ag</td>
<td>General Formal Ag</td>
<td>General Formal Ag</td>
<td>General Formal Ag</td>
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<tr>
<td><strong>UNDERCARRIAGE</strong></td>
<td>Two Marsh Mellow® springs**</td>
<td>Two Marsh Mellow® springs**</td>
<td>Two Marsh Mellow® springs**</td>
<td>Two Marsh Mellow® springs**</td>
<td>Two Marsh Mellow® springs**</td>
</tr>
<tr>
<td><strong>INDEPENDENT PTO (OPTIONAL)</strong></td>
<td>1,000 RPM 20-spline 1.75” (45 mm)</td>
<td>1,000 RPM 20-spline 1.75” (45 mm)</td>
<td>1,000 RPM 20-spline 1.75” (45 mm)</td>
<td>1,000 RPM 20-spline 1.75” (45 mm)</td>
<td>N/A</td>
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<tr>
<td><strong>ELECTRICAL SYSTEM</strong></td>
<td>Alternator 185 amp (4) 1,000 cca, 12-V</td>
<td>Alternator 185 amp (4) 1,000 cca, 12-V</td>
<td>Alternator 185 amp (4) 1,000 cca, 12-V</td>
<td>Alternator 185 amp (4) 1,000 cca, 12-V</td>
<td>Alternator 185 amp (4) 1,000 cca, 12-V</td>
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<tr>
<td><strong>HYDRAULIC SYSTEM</strong></td>
<td>Type Load-Independent Flow Division Load-Independent Flow Division Load-Independent Flow Division Load-Independent Flow Division Load-Independent Flow Division</td>
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<tr>
<td><strong>3-POINT HITCH / DRAWBAR</strong></td>
<td>Standard wide swinging drawbar Roller type, +/-32 degrees swing (closed-center, pressure-flow compensated) Roller type, +/-32 degrees swing (closed-center, pressure-flow compensated) Roller type, +/-32 degrees swing (closed-center, pressure-flow compensated) Roller type, +/-32 degrees swing (closed-center, pressure-flow compensated) Roller type, +/-32 degrees swing (closed-center, pressure-flow compensated)</td>
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</tr>
<tr>
<td><strong>FUEL CAPACITY</strong></td>
<td>Standard 305 U.S. gal (1,159 L) 305 U.S. gal (1,159 L) 305 U.S. gal (1,159 L) 330 U.S. gal (1,254 L) 330 U.S. gal (1,254 L)</td>
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<tr>
<td><strong>DIMENSIONS</strong></td>
<td>Wheelbase (in / mm) 118” (2,997 mm) 118” (2,997 mm) 118” (2,997 mm) 118” (2,997 mm) 118” (2,997 mm)</td>
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<tr>
<td><strong>Special Application</strong></td>
<td>27.5”, 30”, 36” (699, 762, 914 mm) 27.5”, 30”, 36” (699, 762, 914 mm) 27.5”, 30”; 36” (699, 762, 914 mm) 27.5”, 30”; 36” (699, 762, 914 mm) 27.5”, 30”; 36” (699, 762, 914 mm)</td>
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</tbody>
</table>

* Manufacturer’s Estimate. Maximum Power at approximately 1,800 rpm. ** Marsh Mellow® spring is a registered trademark of Firestone Industrial Products Company. *** Not available on all configurations

† Manufacturer’s Estimated Drawbar Power at 2,100 Engine rpm (PTO not available)
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.

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.

Visit us at: www.challengerag.com