

Challenger MT800C / MT900C SPECIAL APPLICATION



MT800C/MT900C SERIES

SPECIAL APPLICATION TRACTORS

MEET THE RUGGED &



Challenger

RELIABLE C SERIES



For more than two decades, Cat® engine powered Challenger® tractors have been hard at work in some of the world's most demanding conditions. Whether it's hauling supplies over the ice in Antarctica, or pulling towed scrapers building roads and highways, Challenger tractors have provided the power and productivity needed for high levels of efficiency.

Challenger has set the bar even higher with the MT800C Series Special Application track tractors and MT900C Series Special Application four-wheel-drive articulated tractors. Both models are loaded with features and improvements designed to make a jobsite more productive and efficient.

- The Cat C18 ACERT™ engine boasts a massive 585 engine hp provided by the largest displacement engine commercially available at 18.1 liters.
- The robust Cat powershift transmission provides plenty of gears in the working range while offering the highest transport speed in the industry at 24.5 mph.
- The standard High Flow 59 gpm hydraulic pump provides the flow needed for today's demanding tandem-towed scraper applications.
- The industry-leading 585 engine hp is transferred to the ground through the strongest driveline, largest diameter bar axle and industry-exclusive Goodyear® 1100/45R46 Special Application Single Tire.



LEGENDARY CAT POWER



Challenger



The Challenger MT800C & MT900C Series Special Application tractors feature Caterpillar's ACERT engine technology. The proven Cat C18 engine meets all mandated Tier III emissions requirements and does it without sacrificing performance, reliability or durability.

The Cat C18 boasts an industry-leading 18.1 liters (1,105 cubic inches) of displacement, providing a deep torque reserve and massive lugging ability.

The engine offers up to 42% torque rise and delivers exceptional pulling power in all conditions. Under heavy loads, the MT875C and MT975C have the ability to generate more than 630 engine horsepower (470 kW) — more than any other tractor in their class. This is essential as the construction industry trends toward larger towed scrapers.

ADVANCED ENGINE CONTROL

The ADEM™ 4 electronic control system enables smooth power delivery by coordinating communication between the engine and transmission electronic control modules, taking diesel engine performance even further.

- The efficient fuel system allows for multiple injections during each combustion cycle. Small amounts of fuel are injected at precise times to achieve superior fuel economy and lower emissions.
- A patented Mechanical Electric Unit Injector (MEUI) fuel delivery system adjusts fuel injection rates based on operating conditions to improve fuel economy and reduce noise and emission levels.
- Mid-support of the cylinder liners decreases vibration, thus reducing engine noise, wear on the cylinders and cylinder liners.

THE CHALLENGER DIFFERENCE

The real test of an engine is its ability to maintain power while lugging through tough spots and pulling towed scrapers. MT800C & MT900C Series Special Application tractors have the built-in deep torque reserve that today's operators demand.



MODEL	GROSS ENGINE HP	PEAK HP
MT865C/MT965C	525 (391 kW)	567 (423 kW)
MT875C/MT975C	585 (436 kW)	631 (470 kW)



SHIFT TO GREATER PRODUCTIVITY

The electronically controlled 16F X 4R Cat powershift transmission was specifically designed for the MT800C & MT900C Series Special Application tractors. Each transmission is extensively tested in tough, real-world applications before ever being released to production. Moreover, it has been proven reliable in thousands of hours of field use.



BUILT FOR THE OPERATOR

Four gears in the 6-to-9 operating range supply the necessary responsiveness for special application tractors. The key to productive cycle times with towed scrapers is keeping the tractor speed up, while taking shallow cuts. Closely spaced gear splits, concentrated in the primary working range, help deliver the most usable power.

PULLING POWER MADE EASY

Designed for efficiency, Power Management (PM) optimizes engine speed based on transmission gear and draft load. A rocker switch on the Tractor Management Center (TMC) selects or changes modes to quickly match operating conditions.

MAXIMUM POWER OUTPUT

Heavy draft loads demand maximum power to ensure the scraper cutting edge stays at the proper working depth. Maximum Output mode assists by automatically shifting to keep the engine within the peak power range where horsepower and torque are maximized. This feature allows the operator to focus on the cut area and let the tractor do the shifting.


Featuring the fastest transport speed of any track or wheel tractor, Challenger MT800C & MT900C Series Special Application tractors travel at speeds up to 24.6 mph (39.6 kph) for faster hauls and cycle times.

THE CHALLENGER DIFFERENCE

Constant communication between the Cat powershift transmission and the Cat ACERT engine provides peak performance. Before the transmission executes a shift, it measures the current load on the engine and delivers smoother shifts, resulting in longer life for all related engine components.







Track gauge is easily adjusted from 90 to 128 inches (2,286 to 3,251 mm) without spacers, bolts or the need to de-tension belts.

The in-line design of the undercarriage track frame absorbs shock loads, minimizing the transfer of stresses and vibrations to the frame and operator of the tractor.

Four suspended midwheels mold to the surface of the ground, maximizing ground contact area. This reduces ground pressure and soil compaction, provides unmatched traction and gives the MT800C the smoothest ride of any track tractor in the industry.

The hardbar, in conjunction with a robust stabilizer bar, enables the left and right undercarriages to pivot up and down independently, up to eight degrees each way, to smoothly walk over obstacles on the jobsite.

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THE WORLD LEADER IN TRACK TECHNOLOGY

At 118.1 inches (2,997 mm), the MT800C Series Special Application Mobil-trac™ Undercarriage system wheelbase is the longest in its industry. The long wheelbase and multiple oscillating bogey undercarriage design result in evenly distributed weight over a greater area for minimum compaction, maximum traction and increased efficiency.

A SMOOTH RIDE IN TOUGH APPLICATIONS

Whether on the road or on the jobsite, the features of the MT800C Series Mobil-trac system offer superior levels of traction and comfort. In the cut or on the haul road, the oscillating bogey system allows for a smooth ride.

SPECIAL APPLICATION BELT

The special application belt was specifically designed for towed scraper applications. This belt features 2.5-inch (63.5mm) treadbars to provide superior penetration and traction while reducing treadbar flexing.

THE CHALLENGER DIFFERENCE

The carcass of the special application belt has been designed with extra layers of rubber and cables to improve the belt life and protect the zero-degree cable that holds the belt together.

Five layers of rubber on the inner belt diameter, along with an additional three layers of protective fiber cable, reduce potential damage by debris.

The Special Application belt is available in widths of 30 and 36 inches (762 and 914 mm).

Challenger's unique Mobil-trac system has no grease zerks or daily maintenance points. Simple adjustments to alignment or tension pressure can be made easily and quickly when necessary.



The Challenger MT900C Series Special Application tractors offer the best of both worlds. Starting with the widest and heaviest frame in the industry, the front portion features Challenger's proven cast iron frame to support the Cat ACERT C18 engine and Cat powershift transmission. While the largest diameter axle and strongest driveline in the industry ensure its weight and horsepower are delivered to the ground efficiently and effectively.

- The MT900C Series' 42-degree articulation angle provides the shortest turning radius in the industry.
- Tri-point oscillation provides 13 degrees of movement, ensuring less component stress and greater reliability.
- Axles are pressure-lubed from the transmission sump to reduce friction and power loss.
- Disc brakes on each axle deliver superior stopping power to restrain heavy loads.
- Heavy-duty, dual-sealed bearings surround both ends of the largest articulation pin in the industry for added reliability and performance.
- Extra-large axle housings ensure the structural support to withstand heavy loads and rough terrain.
- The largest standard axles in the industry (5.7 in./145 mm) provide added durability and strength.
- An electro-hydraulic differential lock on each axle ensures maximum power will be available when needed.

FLEXIBLE BALLASTING OPTIONS

Optimal weight balance translates into greater productivity and efficiency, not to mention the ability to put up to 60,000 pounds (27,215 kg) of power to the ground.

INDUSTRY-LEADING TIRE OPTIONS

The choice of single- or dual-tire configurations on all MT900C Series Special Application models adds even more versatility to ensure the MT900C Series is the optimal choice for any scraper application.

- Michelin® MachXbib® (dual tire configuration) – its huge footprint, rounded shoulders and ultra-low pressure allow for less soil compaction and decreased rut depth. The MachXbib also provides exceptional traction through the flat crown and long, deep lugs.
- Michelin Axiobib™ with Ultraflex™ Technology (dual-tire configuration) – by reinforcing the tire sidewall and allowing up to 20% greater flex than a standard radial tire, Michelin's Axiobib has a significantly larger footprint while increasing traction and flotation.

- Goodyear 1100/45R46 (single-tire configuration) – this durable radial tire enables operators to maintain the cut area easier by fitting towed scrapers in the same cutting width as the tractor. This tire also has added interior steel to create a reinforced sidewall that is highly resistant to torsion, tension and heat. The added steel increases stability while cornering and allows for greater load capacities.

**GOODYEAR**

THE UNDENIABLE STRENGTH





Challenger

A HIGHER STANDARD IN HYDRAULIC POWER

Challenger MT800C & MT900C Series Special Application tractors are as big on hydraulic power as they are on raw horsepower, meeting today's demanding standards for tandem-towed scraper operations.

Having to choose between pulling power and hydraulic flow is a thing of the past with the MT800C & MT900C Series hydraulic system.

- Industry-leading 59 gpm (224.2 lpm) pump (standard feature)
- Simplified system with common mid-stack design
- Up to six in-line fingertip remote valve levers

OPTIMAL FLOW AND PRESSURE ADJUSTMENT

The TMC display is used to control all remote implement valves, allowing the operator to electronically adjust flow rates, adjust timed detents and precisely adjust individual valve operation. The system utilizes a separate controller built into each valve, allowing the operator to direct continuous flow through any one coupler.

THE CHALLENGER DIFFERENCE



The valve body design offers four electric-over-hydraulic circuits (standard on all models). An optional fifth or sixth valve is available to meet the demand of pulling multiple towed scrapers.



WELCOME TO COMFORT AND CONVIENENCE

The MT800C & MT900C Series Special Application tractor cabs offer 108 cubic feet (3.06 m3) of space – maximizing the usable space for total operator comfort.

SPEND THE DAY IN RELAXED COMFORT

The air-suspension seat adapts with ease to the operator for a smoother ride. Standard adjustments include height and suspension, fore and aft seat position, lumbar support and back tilt position.

For the ultimate in operator comfort, the optional deluxe VRS heated operator's seat utilizes a specially tuned damping system to provide continuous real-time automatic damping force and is available in cloth or leather.

COMFORTABLE IN ANY WEATHER

The Surround-Flow™ ventilation system features 12 strategically placed vent locations to maintain comfort in any weather. Vents have the ability to direct air onto each window for quick defrosting or to create a cool air barrier in the heat of the day.

THE CHALLENGER DIFFERENCE

Redesigned ergonomic controls and increased comfort help the operator stay focused and alert for greater safety and productivity during long days behind the wheel.

SUPERIOR OFFICE AMENITIES

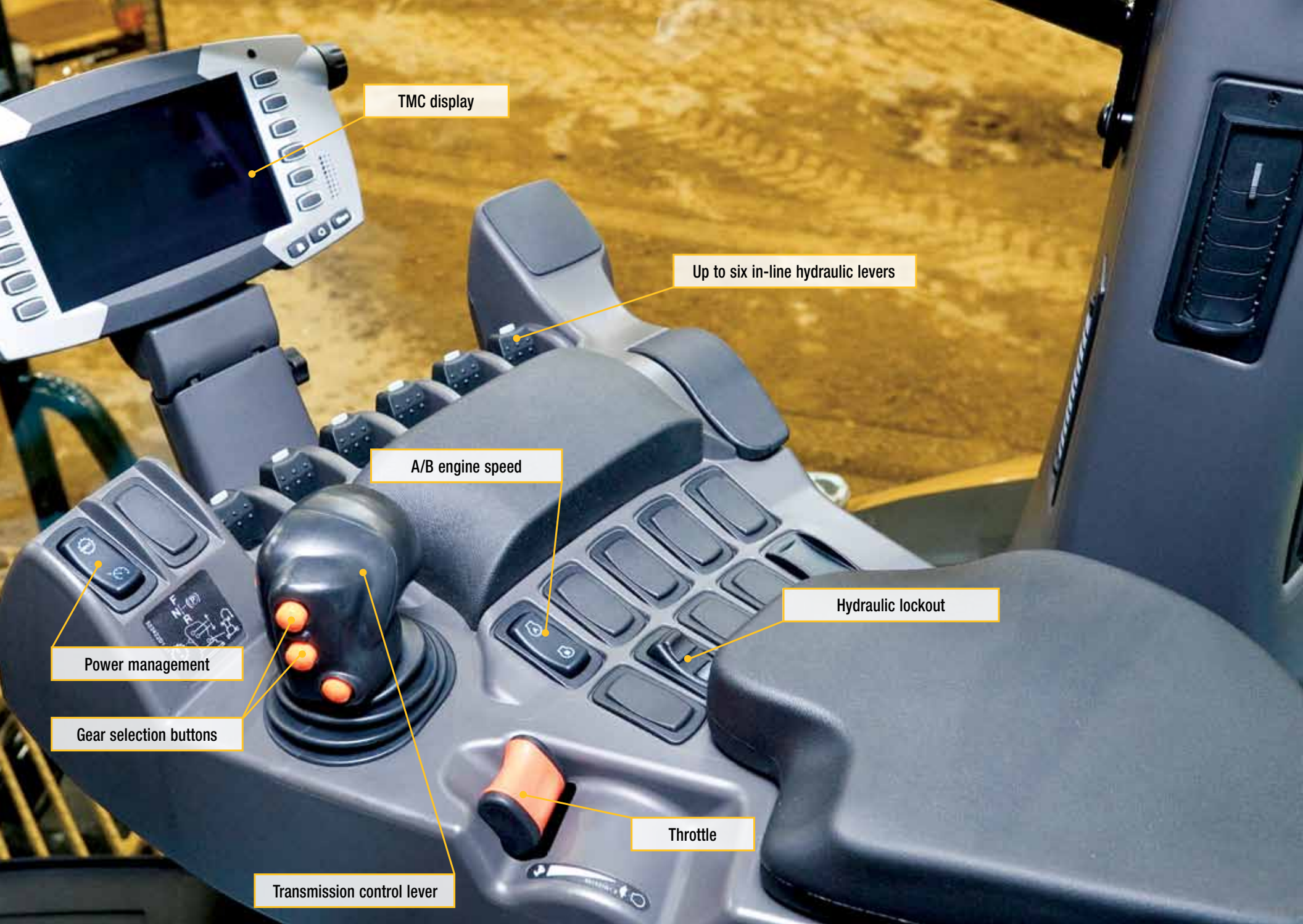
A quality ride is just the beginning of the comfort features found within the MT800C & MT900C Series' spacious cab. Some of the other amenities include:

- Tractor Management Center (TMC) controls are arranged by function, allowing for easy and intuitive operation
- Digital dash displays all major tractor and engine functions, including selected gear, engine RPM and machine hours
- Tilt and telescopic steering column
- Additional storage (coat hook, literature/notebook storage area, compartment under buddy seat)
- A wide assortment of management, comfort and convenience features (mobile phone holder and outlet, four stereo speakers, front sun visor and a power pack of additional electrical outlets)

MIRRORS WITH A PURPOSE

Large side mirrors and a wide-angle inside mirror help keep an eye on towed scrapers without having to twist around. Electronically remote-controlled heated mirrors are standard for a clear view in all weather conditions.





TMC display

Up to six in-line hydraulic levers

A/B engine speed

Hydraulic lockout

Power management

Gear selection buttons

Throttle

Transmission control lever



DESIGNED TO KEEP YOU ROLLING



Challenger

Challenger MT800C & MT900C Series Special Application tractors were designed for performance and serviceability, resulting in less time spent doing general maintenance and more time on the job. With five easy-to-access service points, maintenance inspections become part of the daily routine instead of a time-consuming chore.

- The tilt-up hood raises from the front, providing easy access to key service points like batteries and cooling cores.
- A battery disconnect that turns off all electrical power to the tractor is now standard.
- Checking and topping off engine oil is easily done from ground level.
- The dual-element air cleaner is positioned directly above the engine for easy inspection and replacement.
- No tools are required to open the cooling cores to remove trash build-up or blockage.
- The cab air filter is conveniently located under the cab roof overhang and is removable, without tools, for cleaning or replacement.
- A large toolbox, integrated into the steps, stores tools up to 24 inches (610 mm) long, with a total capacity of 150 pounds (68 kg).
- The single-point fuel fill is easily accessible for quick refueling.
- Hydraulic and powertrain oil sight gauges are conveniently located at the rear of the tractor.



DIAGNOSTICS IS A BREEZE

While downtime never comes at a convenient time, it doesn't take long to diagnose a problem thanks to the ISOBUS technology. Since every component on the tractor communicates in the same language, a service technician need only plug in a portable diagnostic unit and it will display the results in a matter of seconds.





AGCOMMAND™

Telemetry-based technology is an emerging trend in the earthmoving business enterprise.

AGCO's AGCOMMAND system is a leading-edge data-recording tool that helps users optimize fleet performance, monitor operating costs and generate reports.

HOW AGCOMMAND WORKS

The AGCOMMAND system collects GPS satellite location and machine performance data every 60 seconds, allowing users to see where machines are, where they have been and the information collected at each interval.

DATA COLLECTION

Machine performance data is collected from the CAN bus or other machine sensors. Data is then transferred via a GPRS network and is accessed through an easy-to-use website.

BENEFITS OF AGCOMMAND

Utilizing this information will help users manage uptime efficiency, maximize productivity and increase profitability. The full mobility of the system allows AGCOMMAND to be fitted to any piece of machinery in a fleet, regardless of brand.

OPTIMUM PERFORMANCE

AGCOMMAND is set up to organize information and develop detailed reports. These reports track engine hours, fuel

consumption, operator efficiency and field-specific machine information. By collecting and summarizing this information, the system promotes accountability to help optimize performance and maximize cycles per hour.

MAINTENANCE

AGCOMMAND makes maintenance easier to plan and track. Service alerts can be set to signal maintenance intervals. Alerts can also be set to notify your dealer for faster service response time.

GEO-FENCING AND LOGISTICS

Geo-fences, or virtual GPS boundaries, can be created to track when machines enter or exit designated areas. Tracking logistics enable the user to anticipate routine tasks like refueling machines. To help reduce downtime, the system plots a machine's exact position on the map so it can be quickly located.

INTERNAL MEMORY

If a machine leaves a GPRS coverage area, the onboard module will record its location and performance data for up to 50 hours and transfer the information once the machine reenters a coverage area.

EFFICIENCY

Managers using AGCOMMAND can manage multiple fleets from off-site locations. Managers that have numerous locations and projects can utilize logistics to minimize refueling and downtime by having instant tractor performance data.

For more information about AGCOMMAND and machine management, please contact your local dealer.

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MODEL	MT865C	MT875C	MT965C	MT975C
ENGINE	Cat® C18 ACERT™ Tier III	Cat® C18 ACERT™ Tier III	Cat® C18 ACERT™ Tier III	Cat® C18 ACERT™ Tier III
Gross Engine Power - hp (kW)	525 (391)	585 (436)	525 (391)	585 (436)
Engine Power Growth @ 1800 rpm	8%	8%	8%	8%
Peak Engine hp (kW)	567 (423)	631 (470)	567 (423)	631 (470)
Engine Torque Rise @ 1,400 rpm	42%	42%	42%	42%
# Cylinders / # Valves	6 / 24	6 / 24	6 / 24	6 / 24
Displacement - cubic in. (L)	1,105 (18.1)	1,105 (18.1)	1,105 (18.1)	1,105 (18.1)
Aspiration	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and 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)	330 (1,249)	330 (1,249)	390 (1,476)	390 (1,476)
TRANSMISSION	Cat® Powershift 16F / 4R	Cat® Powershift 16F / 4R	Cat® Powershift 16F / 4R	Cat® Powershift 16F / 4R
Maximum Speed - mph (kph)	24.6 (39.6)	24.6 (39.6)	24.6 (39.6)	24.6 (39.6)
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 (lpm)	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)	2,900 (200)	2,900 (200)	2,900 (200)	2,900 (200)
AXLES & FINAL DRIVE				
Bar Diameter - in. (mm)	6 (150)	6 (150)	5.7 (145)	5.7 (145)
Standard Tires/Belts	30" Special Application	30" Special Application	710/70R42	710/70R42
Service Brakes – (Front & Rear Axle)	Wet Disk in Axle	Wet Disk in Axle	Wet Disk in Axle	Wet Disk in Axle
DRAWBAR				
Special Application Hitch Plate - Vertical Load Rating - lbs. (kg)	20,000 (9,071)	20,000 (9,071)	20,000 (9,071)	20,000 (9,071)
DIMENSIONS				
Wheelbase - in. (mm)	118 (2,997)	118 (2,997)	155.5 (3,949.7)	155.5 (3,949.7)
Overall Width w/ Standard Tires - in. (mm)	141.8 (3,601)	141.8 (3,601)	200 (5,077)	200 (5,077)
Overall Length - in. (mm)	270 (6,863)	270 (6,863)	298 (7,569.2)	298 (7,569.2)
Overall Height to Top of Cab - in. (mm)	138.1 (3,509)	138.1 (3,509)	151 (3,835.4)	151 (3,835.4)
Approx. Shipping Weight - lbs. (kg)	42,200 (19,142)	42,200 (19,142)	39,767 (18,038)	39,767 (18,038)
Maximum Operating Weight - lbs. (kg)	53,000 (24,040)	53,000 (24,040)	60,000 (27,215)	60,000 (27,215)



AGCO FINANCE

AGCO Finance understands 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.

See your authorized Challenger dealer for:

- competitive rates
- comprehensive financing
- flexible payment schedules
- flexible terms
- quality service
- leasing options
- virtually unlimited resources

ABOUT AGCO

AGCO, Your Agriculture Company, is a premier manufacturer of agricultural equipment, providing high-tech solutions for professional farmers feeding the world. The company is dedicated to delivering superior customer service, innovation and quality. AGCO products are distributed in more than 140 countries worldwide.

AGCO ANSWERS

(877) 525-4384 AGCOanswers@AGCOcorp.com

At AGCO, customer care isn't just a department. It's a commitment. Contact us with your questions. We'll do our best to answer them promptly or put you in touch with someone who can.



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