IT62H

Integrated Toolcarrier

Cat® C7 Diesel Engine with ACERT™ Technology	
Gross Power (SAE J1995)	172 kW/234 hp
Net Power (ISO 9249) at 1800 rpm	158 kW/215 hp
Bucket Capacity	3.25 to 8.4 m^3
Operating Weight	21 660 to 22 270 kg

IT62H Integrated Toolcarrier

H-Series Integrated Toolcarriers – Setting a New Standard

Reliability and Durability

- C7 ACERT Engine Technology Maintains Performance, Efficiency And Durability While Meeting Emissions Regulations
- Strong, Solid Structures Built To Last

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Performance

- New Caterpillar Hydraulics
- Simultaneous Lift and Tilt functions with M3PC valve.
- Electrohydraulic Implement Controls
- Load Sensing Pump
- Larger counterweight for higher stability and payload capacity
- No lift arm drift with Anti-drift valve
- Easiness of operation with optimum linkage design (reach and dump clearance)
- Low idle management system for high fuel efficiency

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Versatility

- 8-bar linkage delivers parallel lifting
- Quick coupler offering (Cat and Volvo worktools compatible)
- Wide range of work tools (Buckets, Forks and more)
- Special Machine Arrangement – Waste Handler Package
- 3rd implement function

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Performance you can feel with the capability to work in the most demanding applications. Unmatched operator comfort and efficiency in a world class cab. Revolutionary electronics and hydraulics for low-effort operation. Increased productivity with lower owning and operating costs.

Operator Comfort

- Easy Cab access with inclined ladder
- Excellent Visibility through out the working range with the combination of optimized hydraulic hoses routing and the cab raised by 50 mm
- Best rear visibility with slope hood and optional rear view camera
- Optional Control Joystick for Tilt and Lift movement
- Low cab sound level
- Optional Heated Deluxe Seat for additional comfort
- Soft detents levers

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Serviceability

- Service Centers For Convenient Maintenance
- Exceptional Access To Service Points

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Owning and Operating Cost

- Proven Fuel Efficiency
- Superior Maintenance
- Electronic Systems Monitor Product Health And Performance

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Complete Customer Service

Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment. The dealer will help you choose a plan that can cover everything from machine and attachment selection to replacement.

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Reliability and Durability

The Cat IT62H – Built Strong and Tough – Tested And Proven – Ready To Work

- Strong, Solid Structures are built to Last
- ACERT Technology maintains engine performance, efficiency and durability while reducing emissions

Proven Reliability. The IT62H features many of the components designed and proven in previous IT62 models – all contribute to the reliability of the IT62H:

- Frames
- Axles
- Planetary powershift transmission
- IBS – Integrated Breaking System

Engine. EU Stage IIIA compliant C7 engine with ACERT Technology combines proven systems with innovative new technologies to precisely deliver fuel to the combustion chamber. It maintains engine performance, efficiency and durability while dramatically reducing emissions.

The Cat C7 is a 7.2 L displacement, 6-cylinder, electronically governed engine. Electronic fuel injection is provided through the well-proven Caterpillar hydraulically actuated, electronically controlled unit injection (HEUI) system. A wastegate turbo-charger, equipped with a titanium wheel for improved durability, combined with air-to-air aftercooling (ATAAC) provides consistent high horsepower with increased altitude capability.

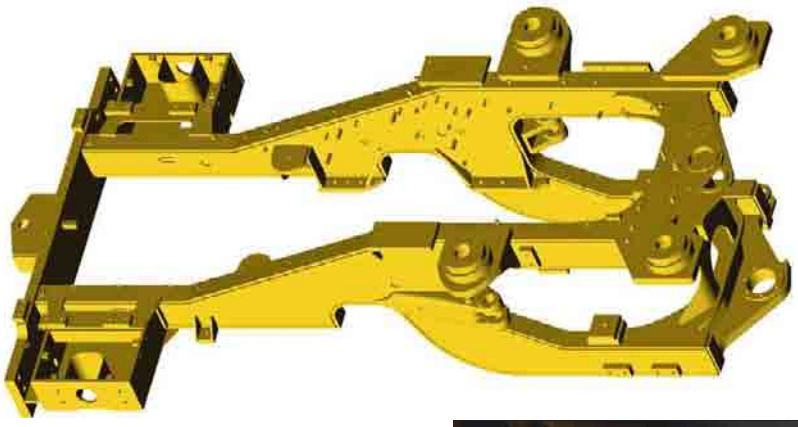
Electronic Controller. The engine is governed by the ADEM A4 electronic control module. The controller continually adjusts engine output based on load demand using a series of sensors located on the machine and engine.

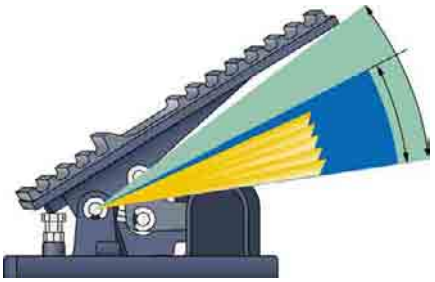
Hydraulically Actuated Electronic Unit Injectors (HEUI). The HEUI system has been at work in Cat engines across the product line with a proven track record of consistent, durable, reliable performance.

Powershift Transmission. The IT62H continues to use heavy-duty proven powershift transmission technology. The planetary powershift transmission features heavy-duty components to handle the toughest applications and for fast direction changes. Built-in electronic controls enhance productivity and durability.

Control Throttle Shifting. Controlled Throttle Shifting regulates engine speed during high-energy directional changes for smoother shifting and longer component life.

Electronic Clutch Pressure Control. Electronic Clutch Pressure Control (ECPC) system modulates clutches individually to improve shift quality, component life and operator comfort. Adjustment is simplified with all solenoid valves externally mounted on top of the transmission housing.





Front Frame. The front frame provides a solid mounting base for the front axle, lift arms, lift cylinders and tilt cylinder. The fabricated, four-plate loader tower absorbs the forces associated with loading, twisting and penetration.

Rear Frame. A full box-section engine rear frame with hitch plates at the front end provides a strong, rigid structure that resists twisting and impact loads. The result is an extremely solid mounting platform for the engine, transmission, axle, ROPS and other accessories.

Axles. The IT62H axles are designed by Caterpillar for durability in all operating conditions. The front axle is rigidly mounted to the frame to support the weight of the wheel loader and withstand internal torque loads as well as external forces encountered throughout operation. The rear axle is designed to allow ±13° oscillation. All four wheels remain on the ground over uneven terrain providing excellent stability and traction.

Spread Hitch. The distance between the upper and lower hitch plates is important for machine performance and component life. The Cat spread hitch design provides excellent load distribution and bearing life. Both the upper and lower hitch pins pivot on double tapered roller bearings – improving durability by distributing both vertical and horizontal loads over a larger surface area. The wide opening also provides excellent service access.

Structures. The articulated frame design of the IT62H features a durable box-section engine frame and rigid four-plate loader tower that is robotically welded. Robotic welding creates frame joints with deep plate penetration welds and excellent fusion for maximum strength and durability.

8-Bar Robust Linkage. This linkage provides parallel lift to keep the load level throughout the lift cycle – particularly important when using forks. Parallel lift allows the operator to concentrate on placing the load, instead of retaining it. Visibility to the work tool is excellent. Larger tilt cylinders and a more robust linkage design improve breakout force and overall rackback capability. Rotary sensors for the lift circuit let the operator electronically set detent positions from the cab.

Integrated Braking System (IBS). The Cat exclusive Integrated Braking System reduces axle oil temperatures and improves transmission neutralizer smoothness. IBS has a direct impact on durability of the axles and brakes especially in applications involving long distances and/or heavy braking.

Performance

Work Smart And Move More

- Load sensing hydraulics increase lifting capacities
- Electro hydraulic controls reduce cycle times
- Consistent horsepower regardless of conditions

Load Sensing Hydraulics. The IT62H features a load sensing hydraulic system that automatically adjusts to operating conditions to provide only the hydraulic flow required by the implement for improved fuel efficiency.
With the new Priority Proportional Pressure Compensation Valve, implement control is improved over the previous system – raise/lower and rack back/dump can be operated simultaneously and fine modulation is repeatable for improved productivity. Operators will notice enhanced ease of operation, more rimpull into the pile and a 20% increase in lift force.
A two-pump hydraulic system provides one pump dedicated to the hydraulic system, the other to the steering system. This ensures full flow to both steering and implements – guaranteeing power when and where it is needed.

Electrohydraulic Implement Controls. Finger Tip Electro hydraulic implement controls on the IT62H provide the operator with responsive, smooth and precise control of bucket and lift arms. The implement control console also features a Forward/Neutral/Reverse switch allowing easy and fast directional changes that helps reducing cycle

The standard programmable automatic kick-outs provide flexibility and productivity for precise load and dump target heights. Tilt, lift and return-to-dig kickouts are set by positioning the bucket or work tool and setting a rocker switch in the cab.

Constant Net Horsepower. On many competitive machines, gross horsepower is constant, meaning that net engine power available for actual work will vary based on demands made from parasitic sources, such as air conditioning or cooling fans.
The Cat C7 engine is electronically configured to provide constant net horsepower at full parasitic load enhancing productivity and improving fuel efficiency.

Planetary Power Shift Transmission. Increases number of cycles per hour. The electronic planetary power shift transmission with automatic shift capability is designed, developed and built by Caterpillar. The controlled power shift transmission allows full power, very responsive directional changes that have a direct impact on machine cycle times and productivity. The operator can choose between manual or autoshift modes.

Variable Shift Control. Match transmission shifting patterns to machine application requirements. Variable Shift Control (VSC) improves shift quality and fuel efficiency in certain applications by allowing the transmission to upshift at lower engine RPM.

Ride Control. The optional Ride Control System improves ride, performance and load retention when traveling over rough terrain. Operators gain confidence moving at higher speeds in load and carry operations decreasing cycle times and increasing productivity.

Counterweight. The one-piece counterweight is integrated into the IT62H design and styling. This 1991 kg counterweight incorporates the rear lights into the top of the structure.

Engine Idle Management System. The Engine Idle Management System (EIMS) maximizes fuel efficiency and provides flexibility in managing idle speeds for specific application requirements. Four idle control speeds are available.

- **Hibernate Mode.** Idle speed drops after a preset time to provide lower fuel consumption, reduced sound levels and lower emissions.
- **Work Mode.** Adjust working idle speeds according to customer preference and operating conditions.
- **Warm-Up Mode.** Keep the engine at a consistent temperature in cold conditions.
- **Low Voltage Mode.** Prevent battery drain due to high electrical loads from attachments and accessories.

Versatility

Built For Your Operation

8-Bar Linkage Design. This linkage is optimized to maximize reach, specially in applications when manipulating pallets with forks. This provides easiness of operation while approaching the truck to load the pallet

Anti-Drift Valve. The new H-Series hydraulics feature anti-drift valve which is a load check valve to block hydraulics to avoid lift arm and bucket drift. Useful in application requiring a period of time which lift arm raised.

Special Machine Arrangements. When you have a specialized operation, you need a specialized integrated tool-carrier to be productive. The following machine arrangement is available for the IT62H:

Waste Handling. Guarding and special features designed specifically for waste applications make the IT62H the perfect machine for waste transfer stations, waste-to-energy plants, recycling operations and green waste applications. Work tools designed specially for waste applications can be added to the machine.

Work Tools and Quick Couplers. A variety of buckets, work tools and couplers are available from the factory or from your Caterpillar dealer to customize the IT62H for your operation.

Quick Couplers. Quick couplers provide unmatched versatility for integrated toolcarriers. The hydraulic model allows an operator to change attachments in seconds without leaving the cab. On the manual model, the operator must lock the pins.

Buckets. Various types and sizes of buckets are available to match Cat integrated tool carriers to any job, anywhere, any time.

Pallet Forks. When used with a quick coupler, pallet forks increase the versatility of the machine; ideal for handling a variety of materials.

Material Handling Buckets. The material handling bucket is a flat-floor bucket used for handling stockpiled materials such as aggregates or other easy-to-load materials requiring moderate breakout force.

Material Handling Arms. Material Handling Arms move pipe, concrete blocks, highway dividers and other construction materials quickly and precisely.

Woodchip and Clean-Up Buckets. Woodchip and high-capacity clean-up buckets are available for forestry and millyard applications.

Ground Engaging Tools (GET). Several GET options are available from Caterpillar for the IT62H buckets. A cast corner adapter is incorporated into the design of the buckets that allows a tooth to be placed on the extreme corner for protection against base bucket wear.

Reversible bolt-on cutting edges (BOCE) and a bolt-on half-arrow cutting edge are also available for the IT62H buckets.

The Cat K Series™ tooth system features an easier-to-install tip and provides very secure tooth retention. No special tools are required for installation and removal.

Operator Comfort

Work Comfortably And Efficiently

- Comfortable operation
- Excellent visibility
- Easy entry and exit
- Controlled vibration

Operator Environment. The IT62H maintains the distinction of offering the largest, most ergonomic cab in its class.

Seat. The Cat C-500 Series Comfort air suspension seat, standard in the IT62H, is built strong and durable and is 6-way adjustable to accommodate all-sized operators. The cast one-piece back and seat pan prevent protrusions under the cushions. The seat features an automotive-style lumbar support for maximum comfort. The right hand armrest with integrated implement controls adjusts for comfortable, convenient operation. A heated Deluxe seat option is available for additional comfort.

Vibration. By controlling normal machine vibrations, operator efficiency and productivity are improved. From the ground up, the Cat IT62H is designed with many features, both standard and optional, that reduce vibration.

- The oscillating rear axle follows the contour of the ground while allowing the cab to stay steady.
- The cab is attached to the frame with iso-mounts designed to reduce shock loads from the ground.
- The articulation joint is equipped with two neutralizer valves that prevent frame-to-frame contact.
- Cylinder dampening slows the bucket as it reaches the limits of travel, preventing machine jarring.
- Ride Control is an option designed to reduce jolting and bouncing during load and carry operations.
- Electronically controlled, automatic kickouts prevent the jerking and bouncing associated with abrupt cylinder stops.
- Air suspension seat-mounted implement controls reduce vertical vibrations that come up through the cabin floor.

Soft Detents. Allow the implement lever to return to center after actuation instead of being held in place. Once the operator activates the detent, the lever is released and the work tool will automatically move to the kickout position and the lever will return to center.

Steering System. The conventional steering configuration offers a low-effort hand metering unit hydraulic steering system. Load sensing steering directs power through the steering system only when needed. When not steering, more engine power is available to generate rimpull, breakout force, lift force, and results in reduced fuel consumption. The steering column tilts for maximum operator comfort.

Joystick. An optional electro-hydraulic joystick for Tilt and Lift function is available.

Visibility. The IT62H provides excellent visibility to both the front and rear of the machine. The cab has been raised by 50 mm for unmatched visibility. Excellent Visibility throughout the working range with optimized hydraulic hoses routing. Distortion-free flat glass stretches to the floor of the cab for excellent visibility to the bucket. Wet-arm wipers on both front and back keep the windows clean in any condition. The cab roof has channels that direct rain off the corners of the cab keeping windows clear. An overhang on all sides protects the operator from glare.

Rear Vision Camera. An optional rear vision camera is available to clearly monitor movement behind the integrated toolcarrier.

Lighting Packages. Optional lighting packages are available for roading or low-light applications. The optional High Intensity Discharge (HID) lights provide exceptional lighting for night work. A rotating beacon is available as a safety feature.

Windshield Cleaning Package. An optional windshield cleaning package provides additional steps and handrails to provide easy access for cleaning the front windows.

Entry and Exit. A ladder with self-cleaning steps keeps debris build-up to a minimum. The ladder is at a 5° forward incline for easy entry and exit. Platforms are wide allowing ease of movement to the front or rear of the machine. The main cab door opens a full 180° and latches in place to allow safe navigation to the rear of the machine. The right side door opens 10°, or completely for secondary exit simply by pulling a pin. A full-length ladder on the right side facilitates safe exit if needed.

Serviceability

Easy To Maintain – Easy To Service.

- Grouped service points and sight gauges for easy daily maintenance
- Convenient access to engine compartment for excellent serviceability
- Swing-out grill and cooling cores for easy cleaning
- Electronic systems to monitor product health

Electric Service Center. Batteries, relay panel and an optional tool box are conveniently located below the left-side access platform. The engine shutdown switch is housed with the relay panel. A compartment integrated into the access platform contains the hood tilt actuation switch, battery disconnect switch and optional jump-start receptacle.

Remote Pressure Taps. Pressure taps for the steering and hydraulic systems, transmission and brakes are grouped behind an access panel just below the right-side service platform.

Autolube. Reduce time spent on daily maintenance and downtime for unplanned repairs due to inadequate greasing with the optional Caterpillar Automatic Lubrication System. Precise lubrication of pins and bushings at specific intervals improves component wear and reduces ground contamination from excessive greasing.

S•O•S Services. Sampling valves on the IT62H allow quick access to engine, transmission and hydraulic oils for S•O•S analysis. Oil change intervals and other services can be optimized according to your work schedule, reducing downtime and managing expenses.

Sight Gauges. Well-protected, yet easily visible sight gauges for the transmission oil, hydraulic oil and engine coolant allow easy daily checks while reducing the risk of contaminants entering the systems.

Brake Wear Indicators. Axles are equipped with standard brake wear indicators, allowing a technician to easily determine when it is necessary to service the brakes.

Hydraulic Service Center. Transmission oil and hydraulic oil filters are located in the Hydraulic Service Center, behind the hinged, right-side access ladder. The hydraulic oil tank can be drained from this location using the access port.

- Hydraulic oil filter change interval at 500 hours
- Transmission oil filter change interval at 1000 hours

Ground Level Grease Points. Grease fittings are grouped on the right side of the machine in two convenient locations – in a service compartment just below the right-side service platform, and a bank located just off the non-engine end frame. These locations facilitate easy lubrication of vital components located throughout the machine.

Engine Compartment Access.
The non-metallic hood on the IT62H has been redesigned and restyled from previous models. Side and top panels are stronger due to more robust reinforcement ribs – the change in contour also adds to rigidity of the hood.

Panels located behind the tires lift up and can be removed for additional access. Roading fenders hinge from the rear and swing out allowing easier access to the engine compartment.

Cooling System. Access for clean-out and maintenance is outstanding. The perforated and corrugated grill minimizes debris build-up and swings out for easy cleaning and access to the cooling cores. The full-width air conditioning condenser and oil cooler cores swing out 45° to allow easy cleaning of the rear radiator face. Panels on either side provide access to the front face of the radiator and ATAAC cores for easy cleaning.

Cab. The entire operator station can be removed in about 45 minutes and is easy to re-attach. Quick disconnects are used so no wires need to be cut and no refrigerant is lost.
Cab cleaning is made easy with channels on the cab floor and no threshold at the door – the floor can be swept or mopped out easily.

Windshield Cleaning Package.
An optional windshield cleaning package consists of two steps for the loader front frame, three additional handrails and two folding mirrors. This package allows access to the entire front windshield for easy cleaning.

A single mechanical lift cylinder with manual back-up opens the hood. The tilting hood provides excellent access to the engine compartment, and if necessary, the entire hood can be removed with the built-in lift points. With the hood closed, quick checks of engine oil level and the coolant sight gauge can be completed through the side service doors.

Electric Priming Pump. An electric fuel priming pump located on the primary fuel filter base eliminates the need to pre-fill or manually prime filters after a change, eliminating engine contamination.

Ecology Drains. Engine, transmission and hydraulic oils can be easily drained with standard-equipment ecology drains. An axle oil ecology drain is optional.

Complete Customer Support.
Cat field service technicians have the experience and tools necessary to service your loader on site. Technical experts at the dealership and Caterpillar can provide additional assistance to field service technicians as needed.

When on-site repair isn't enough, Cat dealerships are fully equipped to service your loader quickly.

Radiator. Brazed aluminum construction provides a stronger joint for maximum durability and resistance to leaks. The 6-fins-per-inch, square-wave core design decreases the chance of blockage and plugging.

Owning and Operating Cost

The IT62H – Best Value For Your Operation

- More return for your integrated toolcarrier investment through proven Cat fuel efficiency
- Sight gauges, grouped maintenance points, easy engine access, ecology drains, maintenance-free batteries all simplify daily maintenance
- Electronic monitoring systems track product health to avoid unscheduled costly repairs
- Unsurpassed parts availability reduces downtime
- Excellent resale value provided by genuine Cat quality, outstanding dealer service and unmatched dealer support programs
- Caterpillar Financial Services and Cat dealers understand your business

Fuel Efficiency. Many manufacturers tout fuel consumption as one of the determining factors for machine acquisition, but fuel consumption is only part of the story. Productivity must also play a part in the decision.

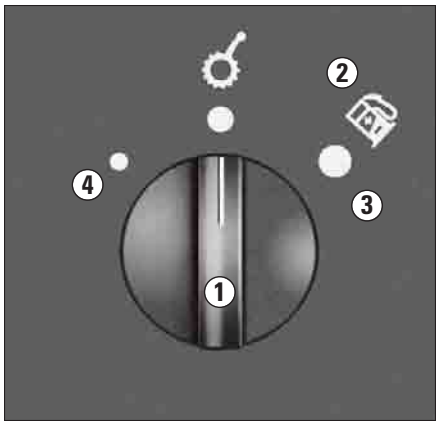
IT62H Fuel Efficiency. Customer testing of the IT62H is showing an improvement in fuel efficiency over the IT62G II. This fuel savings are achieved through the use of

- ACERT Technology
- Caterpillar proportional-flow load sensing hydraulic system
- Engine Idle Management System software
- On-Demand Fan
- Variable Shift Control
- Free Wheel Stator Torque Converter

ACERT Technology Fuel Economy. Based on Caterpillar testing, the fuel economy of Cat engines with ACERT technology is 3 to 5 percent better than current competing technologies. This fuel economy is directly related to the complete combustion of fuel due to the integration between the electronic control that monitors conditions, the air management system that controls air volume and the fuel injection system that delivers just the right amount of fuel as needed.

On-Demand Fan. Temperature levels of the engine coolant, transmission oil, hydraulic oil and air inlet manifold are constantly monitored to adjust the speed of the fan to cooling requirements. Controlled fan speed improves fuel efficiency.

Free Wheel Stator Torque Converter (FWSTC). The free wheel stator torque converter improves power train efficiency in load and carry operations which contributes to the improved fuel efficiency of the IT62H.



1 Variable Shift Control (fuel efficiency). VSC improves shift quality and fuel efficiency in certain applications by allowing the transmission to upshift at lower engine RPMs.
2 ISO symbol for fuel efficiency
3 Economy mode (typically used for load & carry and roading applications)
4 Aggressive mode (typically used for tight truck loading applications)

Maintenance. Proper maintenance of your integrated toolcarrier can help control expenses and lower your owning and operating costs. The IT62H provides unmatched serviceability by offering:

- Hydraulic service center
- Electric service center
- Well-protected, easily visible sight gauges

Complete Customer Support

Cat dealer services help you operate longer with lower costs.

- Ground level maintenance points
- Easy access to engine compartment
- Ecology drains for simple and clean fluid drainage
- Brake wear indicators for ease of inspection
- Airborne debris-resistant, swing-out grill provides more efficient airflow

S•O•S Services. Managing component life and machine availability decreases downtime while improving your productivity and efficiency. S•O•S Services can help you do that. Regular fluid sampling is used to track what is going on inside the equipment. Wear-related problems are predictable and easily and quickly repairable. Maintenance can be done according to your schedule, resulting in increased uptime and flexibility in maintenance and repair before failure.

Product Link. With Product Link owners can collect and track multiple types of information – from machine location and service meter hours, to health and productivity information.

EquipmentManager. With a subscription to EquipmentManager information from Product Link can be transmitted to a computer. Return on equipment investment is optimized through maintenance management and improved uptime.

Machine Selection. Make detailed comparisons of the machines you are considering before you buy. What are the job requirements, machine attachments and operating hours? What production is needed? Your Cat dealer can provide recommendations.

Purchase. Consider the financing options available as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment and owning and operating costs over the long run.

Customer Support Agreements. A Customer Support Agreement (CSA) is any arrangement between you and your Cat dealer that helps you lower your total cost per unit of production. CSAs are flexible, allowing them to be tailored to your business. They can range from simple Preventive Maintenance Kits to sophisticated Total Cost Performance Guarantees. Having a CSA with your Cat dealer allows you more time to do what you do best – run your business.

Resale Value. Owning quality equipment is a very important factor in maintaining resale value. Cat not only supplies quality equipment but also provides product and dealer support to maintain the reliability and durability of your machine.

Caterpillar Financial Services Corporation. Cat Financial understands your business, your industry and the challenges you face. That's why they can provide payment plans to fit your unique needs – and to help you achieve your goals.

Maintenance Services. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil Sampling, Coolant Sampling and Technical Analysis help you avoid unscheduled repairs.

Parts Support. You will find nearly all parts at our dealer parts counter. With parts distribution centers worldwide, most parts can be delivered in 24 hours. Easy access to parts reduces downtime.

Engine

Cat C7 with ACERT Technology	
Gross Power	172 kW/234 hp
Net Power at 1800 rpm	
ISO 9249	158 kW/215 hp
80/1269/EEC	158 kW/215 hp
Peak Torque (net) at 1400 rpm	907 Nm
Total Torque Rise	9%
Bore	110 mm
Stroke	127 mm
Displacement	7.2 liter

- All engine horsepower (hp) are metric including front page.
- EU Stage IIIA compliant
- Rating for net power advertised based on power available when the engine is equipped with alternator, air cleaner, muffler and on-demand hydraulic fan drive at maximum fan speed.

Sound

- The operator sound pressure level measured according to the procedures specified in ISO 6394:1998 is 69 dB(A) for the cab offered by Caterpillar, when properly installed, maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environments.
- The European Union 2000/14/EC labeled spectator sound power level is 106 dB(A).

ROPS/FOPS

- Caterpillar cab with integrated Rollover Protective Structure (ROPS) is standard in Europe.
- Rollover Protective Structure ROPS meets ISO 3471:1994 criteria.
- Falling Objects Protective Structure (FOPS) meets ISO 3449:1992 Level II criteria.

Brakes

Meet ISO 3450:1996 standard.

Operating Specifications

Operating Weight	21 663 kg
Static Tipping Load, Full Turn	13 422 kg
Breakout Force	170 kN
Bucket Capacities	3.25 to 8.4 m^3

- Operating weight with 3.25 m^3 material handling bucket and bolt-on cutting edge.

Hydraulic System

Implement System	
Pump Output	270 l/min
Relief lift valve setting	275 bar
Relief tilt valve setting	302 bar
Hydraulic Cycle Times	seconds
Raise	6.0
Dump	2.1
Lower, Empty, Float Down	2.6
Total	10.7

- Implement system, variable axial piston pump (rated at 2100 rpm and 69 bar)
- Cycle times with rated payload

Transmission

Forward	km/h
1	7
2	13
3	23
4	38
Reverse	
1	8
2	14
3	25
4	40

- Maximum travel speeds (23.5–25 tires)

Axles

Front	Fixed
Rear	Oscillating ± 13°
Maximum Single-Wheel Rise and Fall	470 mm

Service Refill Capacities

	Liters
Fuel Tank	338
Cooling System	42
Crankcase	30
Transmission	34
Differentials and Final Drives	
Front	36
Rear	36
Hydraulic Tank	110

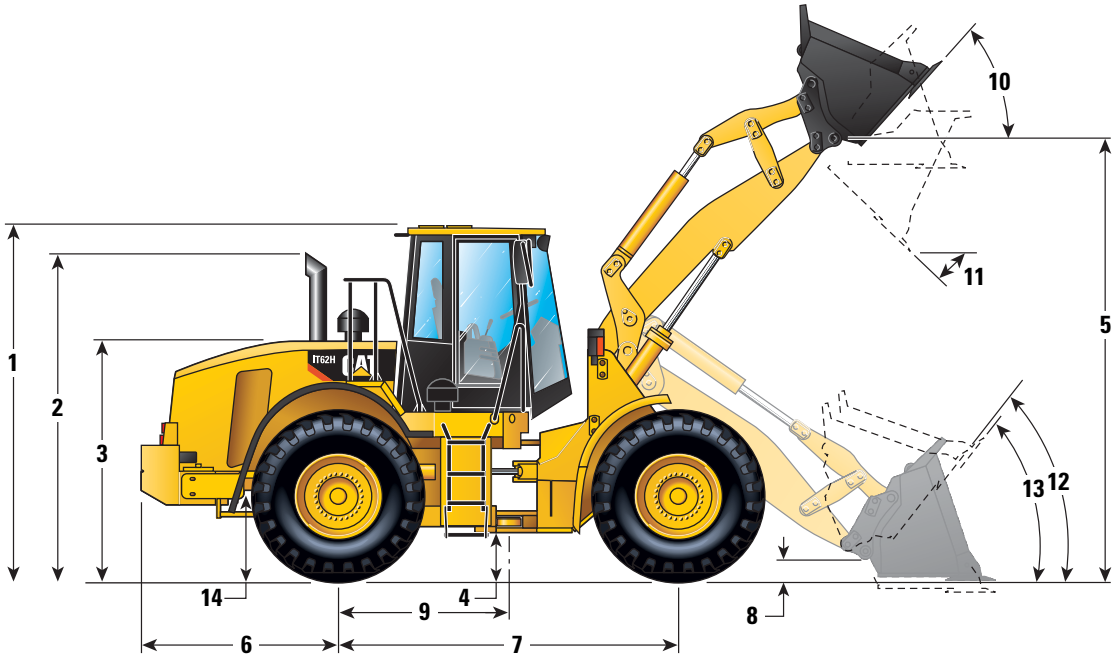
Tires

23.5 R 25, L-3 (XHA MX)
23.5 R 25, L-5 (XMINE MX)
23.5 R 25, L-2 (XTLA MX)
23.5 R 25, L-3 (VMT BS)

In certain applications (such as load and carry) the loader's productive capabilities might exceed the tires' tonnes-km/h capabilities. Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model. The 23.5-25 size range and other special tires are available on request.

Dimensions

All dimensions are approximate



		mm
1	Height to top of ROPS	3452
2	Height to top of exhaust pipe	3369
3	Height to top of hood	2462
4	Ground clearance with 23.5 R 25, L-3	412
5	Bucket hinge pin height (B-pin)	4123
6	Center line of rear axle to edge of counterweight	2000
7	Wheelbase	3350
8	Bucket hinge pin height at carry (B-pin)	315
9	Center line of rear axle to hitch	1675

10	Rack back at maximum lift	58°
11	Dump angle at maximum lift	49°
12	Rack back at carry	52°
13	Rack back at ground	44°
14	Height to center line of axle	748 mm

Tire Specifications

	Width over tires	Change in vertical dimensions	Change in operating weight	Change in static tipping load
	mm	mm	kg	kg
23.5 R 25, L-3 (XHA MX)	2784	0	0	0
23.5 R 25, L-2 (VSW BS)	2862	+6	+20	+14
23.5 R 25, L-2 (VUTD2A BS)	2866	+10	-41	-29
23.5 R 25, L-2 (XTLA MX)	2801	+7	-112	-79
23.5–25, L-2 (SGGL FS)	2834	+14	-472	-335
23.5 R 25, L-3 (VMT BS)	2851	+3	+124	+88
750/65 R 25, L-3 (XLD MX)	2879	+7	+460	+326
23.5 R 25, L-5 (XMINE MX)	2807	+26	+872	+619

Specifications

Material Handling Buckets

		Bolt-on Cutting Edge	Bolt-on Cutting Edge	Bolt-on Cutting Edge	Bolt-on Cutting Edge
Rated bucket capacity	m^3	8.4***	3.8	3.4	3.25
Struck capacity	m^3	6.8	3.0	2.7	2.5
Bucket width	mm	3277	3040	2886	2886
Dump clearance at full lift and 45° discharge	mm	2415	2727	2807	2841
Reach at full lift and 45° discharge	mm	1641	1306	1260	1226
Reach with lift arms horizontal and bucket level	mm	3361	2903	2814	2767
Digging depth	mm	53	60	41	41
Overall length	mm	9001	8556	8448	8402
Overall height with bucket at full raise	mm	5696	5248	5267	5220
Loader turning radius with bucket in carry position	mm	5994	5994	5994	5994
Static tipping load straight*	kg	15 225	15 580	16 000	16 061
Static tipping load at full articulation	kg	12 584	12 965	13 362	13 422
Breakout force**	kN	109	151	163	170
Operating weight*	kg	22 272	21 900	21 696	21 663

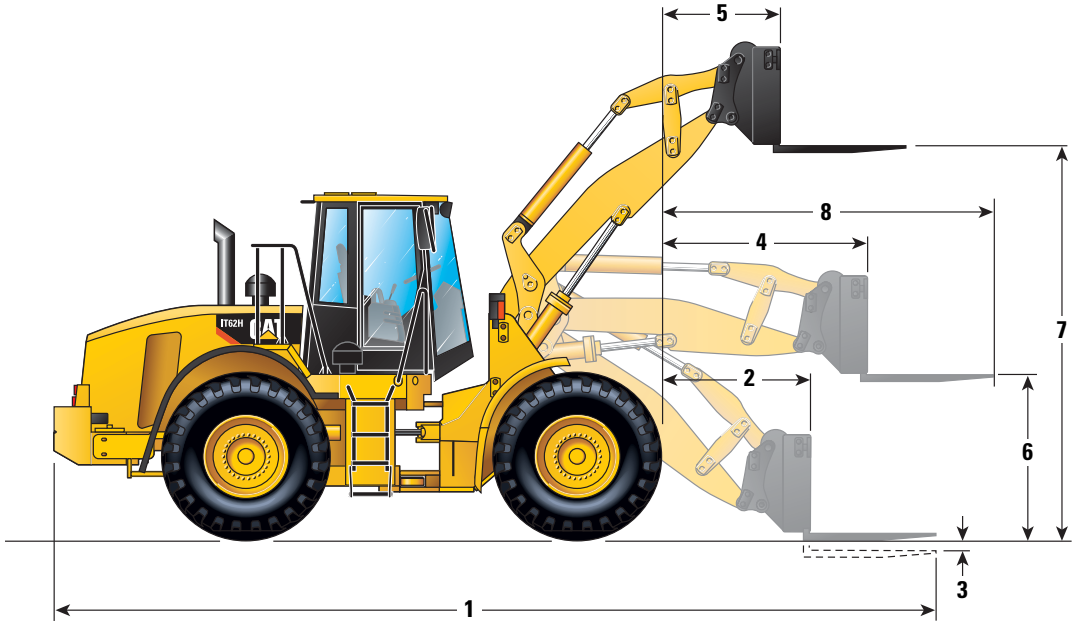
* Static tipping loads and operating weights shown are based on standard machine configuration with 23.5 R 25 tires, full fuel tank, coolants, lubricants, air conditioner, ride control, toolbox, conversion arrangement CE including sound suppression, 3rd function, roading fenders, limited slip rear axle, quick coupler and operator.

** For buckets with adapters, tips and segments, value is measured 102 mm behind the tip of the segment, with bucket hinge pin as pivot point, in accordance with SAE J732C.

*** Light material only

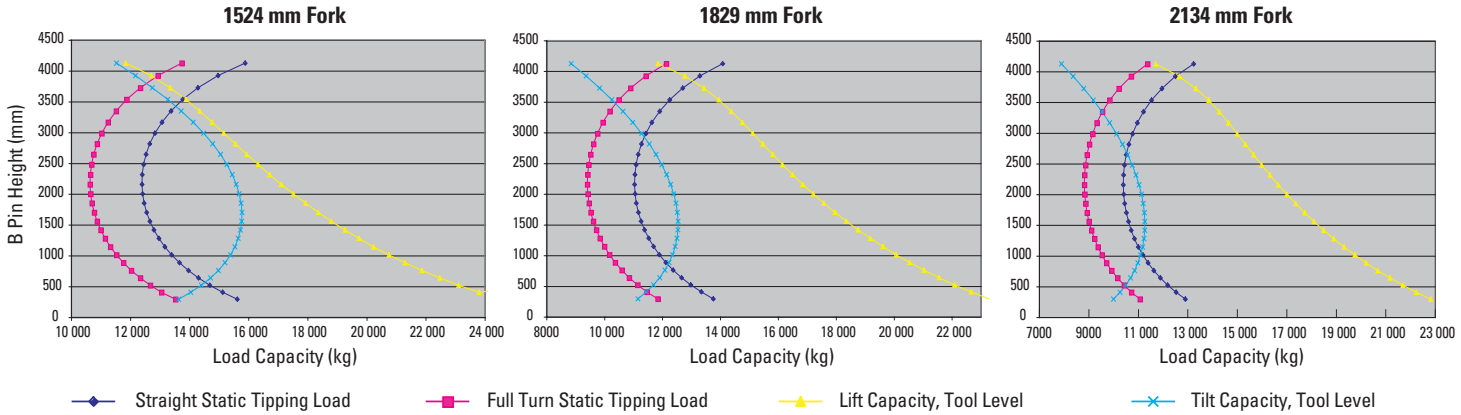
Dimensions – Pallet Forks and Grapple Fork

All dimensions are approximate



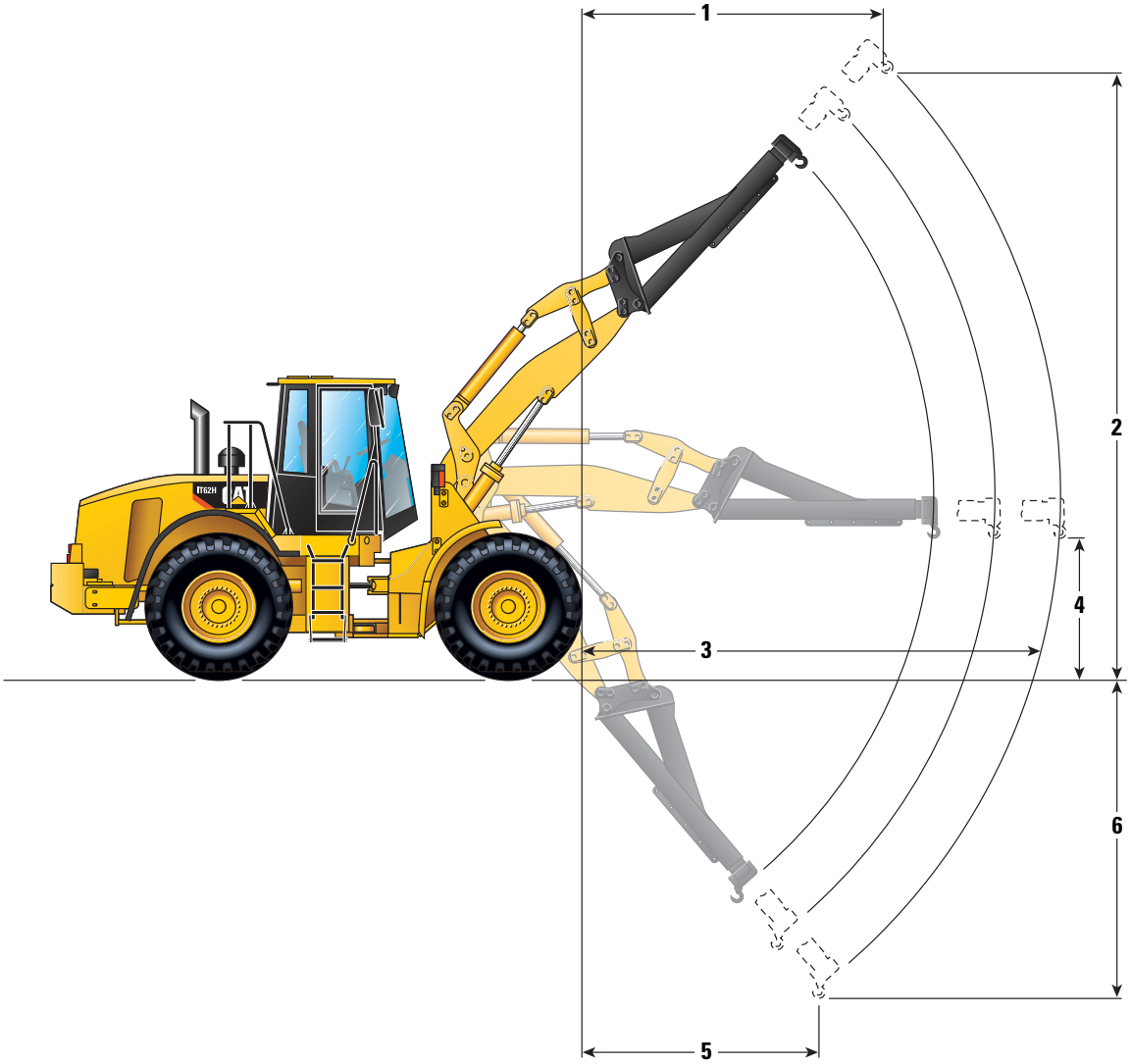
				Pallet Forks	Grapple Fork (2.1 m³)
Fork tine length	mm	**1524**	**1829**	**2134**	**1177**
Fork width	mm	2438	2540	2540	1839
1 Overall length, fork level on ground	mm	9064	9486	9797	8646
2 Carriage reach, fork level on ground	mm	1404	1522	1527	–
3 Tine height, minimum lift, fork level	mm	82	69	78	1.5
4 Carriage reach, lift arm and fork level	mm	1996	2180	2193	–
5 Carriage reach, maximum lift, fork level	mm	1138	1321	1334	–
6 Tine height, lift arm and fork level	mm	1757	1839	1848	1769
7 Tine height, maximum lift, fork level	mm	3817	3899	3908	3829
8 Overall reach, lift arm and fork level	mm	3520	4009	4327	3064
Overall height of fork at full lift and clamp open	mm	–	–	–	6731
Maximum opening across tine and clamp	mm	–	–	–	2964
Static tipping load, straight with lift arm and forks level	kg	12 395	11 045	10 407	11 639
Static tipping load, full 40° turn with lift arm and forks level	kg	10 637	9413	8833	9816
Operating weight*	kg	21 426	21 823	22 047	22 618

* Static tipping loads and operating weights shown are based on standard machine configuration with 23.5 R 25 tires, full fuel tank, coolants, lubricants, air conditioner, ride control, toolbox, conversion arrangement CE including sound suppresion, 3rd function, roading fenders, limited slip rear axle, quick coupler and operator.



Dimensions – Material Handling Arm

All dimensions are approximate



Hook Position		Retracted	Mid-Position	Extended
1 Hook reach, maximum lift	mm	2068	2495	2921
2 Hook height, maximum lift	mm	6234	6910	7587
3 Hook reach, lift arm level	mm	3961	4761	5561
4 Hook height, lift arm level	mm	1828	1828	1828
5 Hook reach, minimum lift	mm	2187	2688	3190
6 Hook height, minimum lift	mm	-1915	-2539	-3163
Static tipping load, straight	kg	9627	8266	7236
Static tipping load, full turn	kg	8278	7105	6218
Operating weight*	kg	20 891	20 891	20 891

* Static tipping loads and operating weights shown are based on standard machine configuration with 23.5 R 25 tires, full fuel tank, coolants, lubricants, air conditioner, ride control, toolbox, conversion arrangement CE including sound suppression, 3rd function, roading fenders, limited slip rear axle, quick coupler and operator.

Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for specifics.

Electrical

Alarm, back-up
Alternator, 80-amp brushless
Batteries, maintenance-free (2) 950 CCA
Ignition key; start/stop switch
Lighting system, halogen (6 total)
Main disconnect switch
Starter, electric, heavy-duty
Starting and charging system (24-volt)

Operator Environment

Bucket/work tool function lockout
Cab, pressurized and sound-suppressed
  ROPS/FOPS
  Radio-ready (entertainment) includes antenna, speakers and converter (12-volt, 10-amp)
Cigar lighter and ashtray (12-volt)
Coat hook (2) with straps
Computerized Monitoring System
  Instrumentation, gauges:
    Digital gear range indicator
    Engine coolant temperature
    Fuel level
    Hydraulic oil temperature
    Speedometer/tachometer
    Transmission oil temperature
  Instrumentation, warning indicators:
    Air inlet heater
    Axle oil temperature
    Electrical, alternator output
    Engine inlet air temperature
    Engine oil pressure
    Fuel level
    Fuel pressure, high/low
    Hydraulic oil level
    Parking brake
    Primary steering oil pressure
    Service brake oil pressure
    Transmission oil filter bypass
Controls, electrohydraulic, lift and tilt function
Heater and defroster
Horn, electric (steering wheel/console)
Light, dome (cab)
Lunchbox, beverage holders and personal tray
Mirror, rearview (internally mounted)
Seat, Cat Comfort (cloth) with air suspension
Seat belt, retractable, 51 mm
Steering column, adjustable angle
Wet-Arm wipers and washers, front and rear
  Intermittent front wipers
Window, sliding (left and right side)

Power Train

Brakes, full hydraulic enclosed wet-disc with Integrated Braking System (IBS) and brake wear indicator
Driveline, extreme service (front)
Engine, Cat C7 with ACERT technology and air to air aftercooler
Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand
Filters, fuel, primary/secondary
Filters, engine air, primary/secondary
Fuel priming pump (electric)
Fuel/water separator
Muffler, sound suppressed
Precleaner, engine air intake
Radiator, unit core
Starting aid, air inlet heater
Switch, transmission neutralizer lockout
Torque converter, free wheel stator
Transmission, automatic/manual, planetary powershift (4F/4R)
Variable Shift Control (VSC)

Other

Automatic work tool positioner
Counterweight
Couplings, Caterpillar O-ring face seal
Doors, service access (locking)
Ecology drains, engine, transmission and hydraulics
Fenders, steel (front and rear)
Guard, crankcase
Hitch, drawbar with pin
Hood, non-metallic, power tilting
Hoses, Caterpillar XT™
Hydraulic oil cooler
Hydraulics, two-function, pilot controls
Kickout, lift and tilt, automatic (in-cab adjustable)
Linkage, 8-bar, parallel lift
Oil sampling valves
Product Link ready
Quick coupler, hydraulically actuated
Remote diagnostic pressure taps
Service center, electrical and hydraulic
Sight gauges:
  Engine coolant
  Hydraulic oil
  Transmission oil level
Steering, load sensing
Vandalism protection caplocks

Tires, Rims, Wheels

A tire must be selected from the mandatory attachments section (price list).
Base machine price includes an allowance based on a premium radial tire.

Antifreeze

Premixed 50% concentration of Extended Life Coolant with freeze protection to -34°C

Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for specifics.

Air conditioner
Buckets, quick coupler, work tools and Ground Engaging Tools (GET)
Camera, rear vision
Cooler, axle oil
Cooling, high-ambient (with or without air conditioning)
Differentials
  Limited slip, front or rear
  NO-SPIN, rear
Drain, axle ecology
Fan, auto-reversing
Fender extensions, front and rear
Fenders, narrow
Fenders, roading
Guard, axle seal
Guard, front window, wide or small mesh
Guard, power train
Heater, engine coolant, 120- or 240-volt
Hydraulic arrangement, three-valve
Joystick control, two- or three-valve
Lights
  directional
  high intensity discharge (HID)
  roading
  warning beacon
  work, cab-mounted
Machine Security System
Mirrors, external
Mirrors, heated external
Mirrors, heated external, folding
Open canopy
Precleaner, turbine
Precleaner, turbine/trash
Product Link
Radio, AM/FM Weatherband (CD)
Radio, CB-ready
Receptacle, starting, 24-volt
Remote pressure taps, transmission
Ride Control System, two- or three-valve
Seatbelt, 76 mm wide
Starting aid, ether
Steering, secondary
Switch, lift lever FNR (steering wheel)
Sun visor, front
Tool box
Special Machine Arrangements
Waste Handler Arrangement

IT62H Integrated Toolcarrier

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Caterpillar dealer for available options.

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