

D6R Series III, D7R Series II Waste Handler



	D6R Series III		D7R Series II	
Engine				
Engine Model	C9 ACERT		Cat 3176C	
Gross Power	170 kW	228 hp	192 kW	258 hp
Flywheel Power	149 kW	200 hp	179 kW	240 hp
Blades				
SU-Blade Capacity	11.2 m ³	14.3 yd ³	14.0 m ³	18.4 yd ³
U-Blade Capacity	–	–	16.8 m ³	22.0 yd ³
LGP Blade Capacity	8.7 m ³	11.4 yd ³	12.3 m ³	16.1 yd ³

D6R Series III, D7R Series II Waste Handler

Specifically designed for waste handling and landfill debris environments.

Waste Handling Guards

- ✓ Extensive guarding helps protect critical machine components, body panels and the radiator from being damaged by debris under harsh waste handling environments. Minimizing build-up helps prevent component damage. **pg. 4**

Debris Resistant Features

- ✓ A variety of debris environment features are included with the Waste Handling Arrangement to reduce plugging, extend service life, and enhance productivity. **pg. 6**

Required Attachments

- ✓ These attachments are required and must be ordered with the basic Waste Handling Arrangement. These include clamshell guards, trash core AMOCS radiator, ejector or Flexxaire Fan, laminated thermal shields, and rear striker bars. **pg. 7**

Caterpillar® Waste Handling Track-Type Tractors offer a variety of options to meet the demands of specific waste handling needs. Specially designed and field proven for work in the severest of landfill conditions.



Required Attachments

- ✓ These attachments are required and must be ordered with the basic Waste Handling Arrangement. These include engine enclosures, hydraulic and fuel tank guards, ROPS-mounted air conditioners and condenser fans, cylinder mounted lights, and turbine precleaner. **pg. 8**

Recommended Options

- ✓ Several additional options are highly recommended to complement the Waste Handling Arrangement and ensure peak performance. These range from enhanced cab, landfill blades and front striker bars to specially designed track shoes and hydraulic rippers. **pg. 10**

Serviceability and Customer Support

The major component modular design concept moves a generation ahead in simplified service and repair. Customer support is unmatched in the industry. **pg. 12**



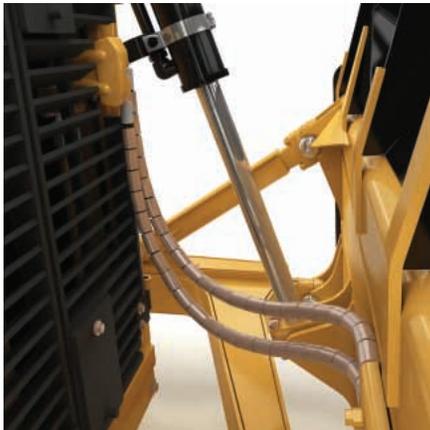
✓ *New Feature*

Waste Handling Guards

Extensive guarding helps protect critical machine components, body panels and the radiator from being damaged by debris under harsh waste handling environments. Minimizing build-up helps prevent component damage.



Hinged Radiator Guard. The hinged radiator guard protects the cooling system. It comes equipped with two quick release “T” handles for the center-opening guard, allowing easy access to the radiator for cleaning. Covers protect the handles from damage. Special hinge latches retain the guard in the open or closed positions.



Tilt Cylinder Lines Guards. The tilt cylinder lines guards help protect hydraulic lines from contact damage, while maintaining hose flexibility.



Extreme Service Crankcase (bottom) Guards. The crankcase (bottom) guards serve a dual purpose. They help prevent contact damage to vital power train components, and help keep debris out of the power train compartments.



Chassis Guards. The chassis guards help protect the engine compartment by deflecting debris from rising upward along the chassis.



Pivot Shaft Seal Guards. The pivot shaft seal guards help prevent debris from entering and damaging the Duo-Cone® seals as well as protecting the bolts on the pivot shaft seal retainers.

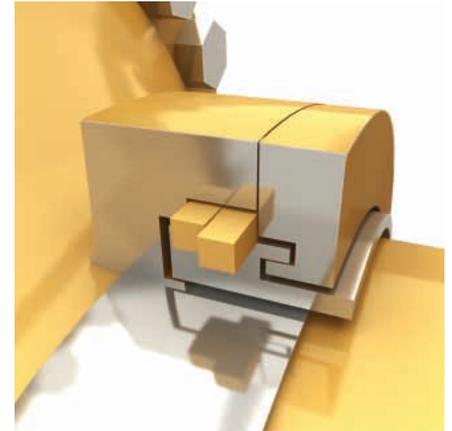
Note: The D6R Series III does not have a pivot shaft.



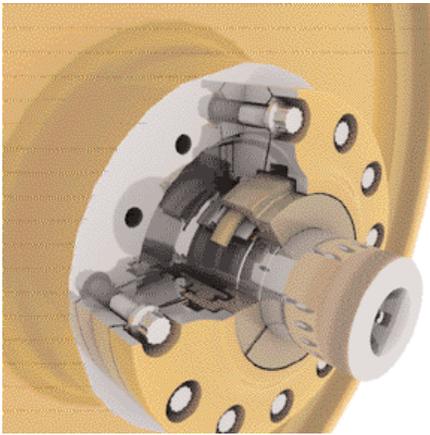
Idler Seal Guards. The idler seal guards help keep wire, fishing line, strapping, etc., from wrapping around and damaging the Duo-Cone seals.



Final Drive Seal Guards. The final drive seal guards help prevent wire, nylon strapping, etc., from wrapping around and damaging the Duo-Cone seals. The outer guard is now stationary, thicker, and has increased hardness, all of which help prevent excessive wear from debris.



Seal Guard Design. This design offers superior protection to the seal. Debris would have to make four 90° turns, penetrate the packing material, and then make two additional 90° turns.



Debris Resistant Features

Additional modifications enhance productivity and help prevent damage.



Rear, Tank-mounted Lights. The rear, tank-mounted lights are relocated on the ROPS, which removes the lights from the concentrated debris environment to help protect them from damage. Combinations vary depending on each model.



Front Lights. The front lights are mounted on top of the bulldozer lift cylinders allowing them to project light over the trash rack and keep the lights above the concentrated debris environment for longer service life.



Heavy-duty Handles. The heavy-duty handles are manufactured from solid rod to withstand the rigors of landfill operation.



High-capacity Ducted Alternator. The high-capacity 95-amp alternator provides additional power required for electrical accessories such as supplemental lights and communications and entertainment radios. The ducting helps prevent debris from entering into the alternator.



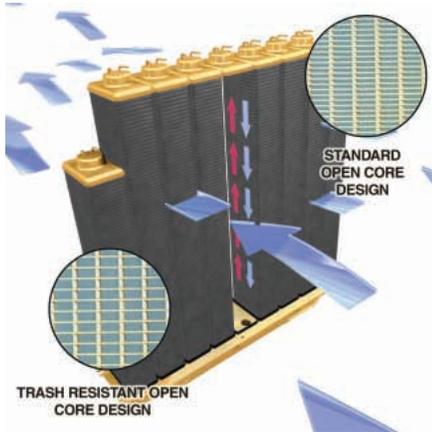
Additional Sealing. To help eliminate debris entry into areas of the machine additional sealing is provided. Key areas include: engine enclosures, platforms, hydraulic tank, ROPS support, battery box, striker bar box, and rear case opening.

Required Attachments

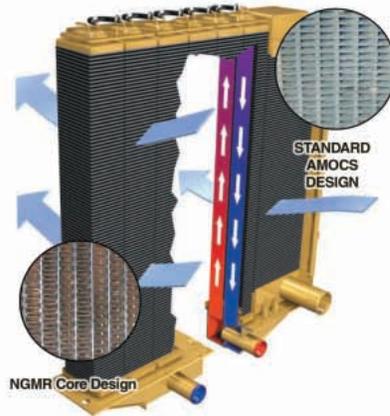
These options must be ordered in addition to the basic Waste Handling Arrangement.



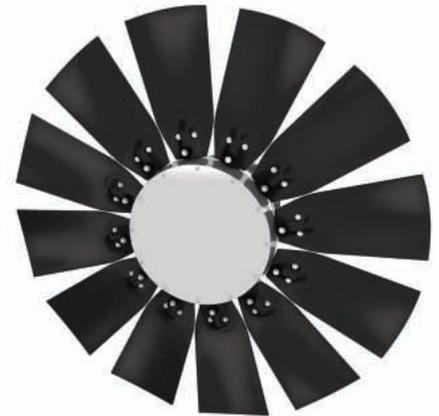
Clamshell Guards. The clamshell guard provides a non-rotating guard installed over the final drives to help prevent wire wrap. The guard includes inspection plates.



Radiator (AMOCS) (D7R II). The AMOCS radiator utilizes an exclusive two pass cooling system and increased cooling surface area to provide significantly more cooling capacity than conventional systems. A trash core radiator is available with six fins per inch, replacing the standard nine fins per inch.



Radiator (AMOCS with NGMR) (D6R III). The AMOCS radiator with the Next Generation Modular Radiator utilizes a two pass system. This system provides more efficient heat exchange and improved cooling capacity over D6R II. The coolant is routed from a sectioned bottom tank up to the front side, over the top core to the bottom tank. This flow pattern allows the coolant to pass through the radiator twice for better cooling.



Flexxair Fan Engine Control System. The Flexxair fan engine control system automatically reverses fan pitch at preset intervals to purge debris from the radiator and engine compartment. The operator also can manually purge the fan at any time. The Flexxair fan is controlled by the engine ECM (Electrical Control Module).



Ejector Fan. The ejector fan blade is designed with curved edges to help throw debris out radially. This helps prevent debris from clogging the radiator.

Required Attachments

These options must be ordered in addition to the basic Waste Handling Arrangement.



Engine Enclosures. The engine enclosures consist of perforated hood and side panels. The enclosures help prevent airborne materials from entering the engine compartment and help reduce radiator plugging, which can cause cooling system problems.

Note: If the sound suppression arrangement is ordered, the perforated side panels are replaced with solid doors and the perforated hood is replaced with larger rectangular perforations.



Hydraulic and Fuel Tank guard.

The hydraulic and fuel guard helps protect implement hydraulic oil tank, battery box and fuel tank.

- Plates are included on the D7R II to cover the light openings after they are repositioned on top of cylinders and ROPS.



Rear Striker Bars. The rear striker bars incorporate a rigid drawbar and housing with large access doors for storage on machines not equipped with rippers. The rear striker bars are counterweight-ready in case additional rear weight is needed. For machines with rippers, striker bars mount on ripper frame.



ROPS-mounted Air Conditioner

Condenser and Fans. The ROPS-mounted air conditioner condenser and fans are mounted to the back of the ROPS to maintain overall machine height.

- Moving the condenser and fans away from the radiator reduces the concentration of debris and plugging. This relocation also increases the cooling capacity of the machine for operation in higher temperatures.



Laminated Thermal Shields.

The laminated thermal shields cover the exhaust stack inside the compartment, hot-side of the turbocharger, and the exhaust manifold. These shields reduce surface temperatures well below the flash point of most common combustibles encountered.



Supplemental Cylinder Mounted Lights.

The supplemental cylinder mounted lights (four front) are repositioned from the fender/ openings to the top of the cylinders. The fender openings are covered with plates to prevent debris from entering.



Caterpillar Turbine Air Precleaner.

The Caterpillar turbine precleaner provides improved engine air filtration by using the OPTIMAX dual-stage precleaner powered by the engine's intake and exhaust airflows. Intake air is spun by a flow driven impeller. Debris stratifies along the outer wall and is ejected back into the environment. Remaining contaminants are collected and removed by a secondary scavenger system, allowing only precleaned air to continue to the engine's air filter.

Recommended Options

Features for peak performance. Several additional options are recommended to assist in matching your site requirements.



Caterpillar Landfill Blades.

The Caterpillar landfill blades increase the dozing capacity in trash and help prevent material from spilling over the blade and entering the radiator. Wear plates are available and are recommended when working in highly abrasive materials.



Center Hole Track Shoes (D6R Series III).

The center hole track shoes reduce refuse packing within the track and reduces track chain tightening and accelerated pin and bushing wear. The center holes relieve packing by allowing the sprocket to punch out dirt and debris.



Black Painted Hood, Cylinders, and Back of Blade.

The black painted hood, cylinders, and back of blade reduces glare from lights while operating at night and while operating in direct sunlight.

Hydraulic Rippers. Hydraulic rippers are available as single or multi-shank to penetrate tough material fast and rip thoroughly.



Front Striker Bars. The front striker bars angled design prevents debris from riding up the track and damaging the fenders or fuel and hydraulic tanks.



Trapezoidal Hole Track Shoes

(D7R Series II). The trapezoidal hole track shoes reduce refuse packing within the track and reduces track chain tightening and accelerated pin and bushing wear. The trapezoidal holes relieve packing by allowing the sprocket to punch out dirt and debris.



Beacon Light. A heavy-duty Federal Signal Pulsator 551 single flash (5 joules) strobe beacon unit is weather sealed and water resistant with the power supply encased in gel. The beacon is wired directly and can only be turned off by the disconnect switch. Extends above the highest part of the machine for enhanced visibility.



Remote Disconnect. Located in the cab, the remote disconnect switch is in series with the standard machine disconnect. The switch, located on the left side of the operator seat at knee level, allows the operator to access the disconnect switch quickly.



Rear Vision Camera. The camera system can be used to enhance the operator's visibility of his surroundings, or provide a better view of his work tool to increase productivity. The single camera system is compact, rugged, reliable and extremely simple to use. It is designed to be operated in the "automatic" mode where the picture remains dark until the machine is placed in reverse gear. The 7 inch color display is mounted on top of the front dash on the left side, and is designed to have a sharp, clear picture with a 115 degree horizontal camera mounted to the Air Conditioner structure.



Computer Aided Earthmoving System (CAES). The Computer Aided Earthmoving System (CAES) is a high technology earthmoving tool that allows machine operators to achieve maximum landfill compaction, desired grade/slope, and conserve and ensure even distribution of valuable cover soil with increased accuracy. This state-of-the-art machine control system delivers real-time elevation, compaction and grade control information to machine operators on an in-cab display. By monitoring grade and compaction progress, operators have the information they need to maximize the efficiency of the machine, resulting in proper drainage and optimum airspace utilization.



Enhanced Cab. The enhanced cab provides higher cab pressurization for improved cab air quality in dust and debris-laden applications. Includes a powered precleaner, with a high efficiency filter, which reduces system maintenance intervals.

Serviceability

Cat elevated sprocket tractors use a new generation modular design that simplifies service and repair. Easy maintenance and fast in-field component exchange gives you more time on the job.

Built-in Servicing Ease. Less service time computes to more production time. Major components are made as modules and most can be removed without disturbing or removing others.

Grouped Service Points. Grouped service points and easy access to servicing areas make routine inspections fast and convenient.

Power Train Oil Filter and Pressure Taps. The power train oil filter and pressure taps are remote-mounted in the right-hand fender. This provides ease of service and aids machine diagnostics.

Water Separator and Fuel Filter. Easily located just inside the engine access panel, the water separator functions as the primary fuel filter, just ahead of the secondary fuel filter. A standard electric priming pump on the primary filter reduces the effort required to prime the system.

Quick Disconnect Fittings. The quick disconnect fittings allow for fast diagnosis of the power train and implement oil systems.

Ecology Drains. The ecology drains provide an environmentally safer method to drain fluids. They are included on the radiator, hydraulic tank and major power train components.

Diagnostic Connector. A diagnostic connector allows the Cat Dealer's electronic test instrument to quickly troubleshoot the electrical system or access stored data with the use of Electronic Technician (Cat ET) or ECAP.

Pre-testing Modular Components. Pre-testing modular components before installation or after repair assures quality.

Underhood Service Light. To make nighttime service and maintenance easier, an adjustable service light is located under the hood behind the radiator.

Total Customer Support

Caterpillar dealer support is unmatched in the industry!

Machine Selection. Make detailed comparisons of the machines you are considering before you buy. How long do components last? What is the cost of preventive maintenance? What is the true cost of lost production? Your Cat dealer can give you answers to these very important questions.

Purchase. Consider the financing options available, as well as the 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 owning and operating costs over the long run.

Serviceability. Quick and easy serviceability means less downtime and more productivity. Sight gauges, filter locations, convenient access to oil and coolant sampling ports and an engine compartment-mounted work lamp make daily and periodic service faster and easier.

Product Support. Nearly all D6R Series III parts can be found at Cat dealer parts counters. Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. An exchange program for major components may be available. This will shorten repair time and lower costs.

Remanufactured Components. Genuine Cat remanufactured parts helps save money with the same warranty and reliability as new products at cost savings of 40 to 70 percent. Components are available for the drive train, engine and hydraulics.

Parts Pricing. The price of parts can impact the overall owning and operating cost of any piece of equipment and are often overlooked when a purchase is being considered. At several points in the machine's life cycle, maintenance or repair parts will be required. Parts pricing is all about maximizing the bottom line of the end-user and as a result, Cat parts are priced, on average, 35 percent lower than those of other tractors in this size class.

Resale Value. History has proven, and continues to show, that Cat machines bring a much higher price than other brands when resold. This translates into all Cat equipment owners getting a greater return on their investment than with other brands.

Specifications

Model	D6R III		D7R II	
Flywheel Power	149 kW	200 HP	179 kW	240 HP
Operating Weight*	25 736 kg	56,620 lb	27 920 kg	61,500 lb
Engine Model**	Cat C9 with ACERT™		Cat 3176C	
Rated Engine RPM	1850		2100	
No. of Cylinders	6		6	
Bore	112 mm	4.4 in	125 mm	4.9 in
Stroke	149 mm	5.9 in	140 mm	5.5 in
Displacement	8.8 L	537 in ³	10.3 L	629 in ³
Track Rollers (each side)	6/7/8 on (LGP)		7	
Width of Standard Track Shoe	914 mm	36 in	560 mm	22 in
Length of Track on Ground	3.27 m	10 ft 9 in	2.88 m	9 ft 5 in
Ground Contact Area (with Std. Shoe)	5.99 m ²	9288 in ²	3.22 m ²	5016 in ²
Track Gauge	2.28 m	7 ft 5 in	1.98 m	6 ft 5 in
General Dimensions:				
Height (Stripped Top)***	2.26 m	7 ft 5 in	2.56 m	8 ft 5 in
Height (top of ROPS)	3.19 m	10 ft 6 in	3.50 m	11 ft 2 in
Overall Length:				
with Blade	5.46 m	17 ft 11 in	5.82 m	19 ft 1 in
without Blade	4.24 m	13 ft 11 in	4.73 m	15 ft 6 in
Width (over Trunnions)****	2.95 m	9 ft 8 in	2.87 m	9 ft 5 in
Width (w/o Trunnions – Std. Shoe)****	3.15 m	10 ft 4 in	2.54 m	8 ft 4 in
Ground Clearance	433 mm	17 in	416 mm	16.4 in
Blade Types and Widths:				
S	3.36 m	11 ft 0 in	3.9 m	12 ft 10 in
S LGP	3.99 m	13 ft 1 in	4.5 m	14 ft 11 in
SU	3.26 m	10 ft 8 in	3.69 m	12 ft 1 in
U	N/A	N/A	3.99 m	13 ft 1 in
Blade Capacities with Trash Rack:				
S	8.6 m ³	11.2 yd ³	10.9 m ³	14.2 yd ³
S LGP	9.4 m ³	12.3 yd ³	12.3 m ³	16.1 yd ³
SU	11.2 m ³	14.3 yd ³	14.0 m ³	18.4 yd ³
U	N/A	N/A	16.8 m ³	22.0 yd ³
Fuel Tank Refill Capacity	383 L	101.0 gal	479 L	126.5 gal

* Operating Weight: Includes lubricants, coolant, 100% fuel, hydraulic controls, ROPS canopy, FOPS Cab, SU-Blade with 610 mm (24 in) trash rack, special radiator core and ejector fan, drawbar, engine enclosures, fuel tank guard, extreme service crankcase (belly) guard, heavy-duty hinged radiator guard, higher prescreener, front and rear striker bars and operator.

** Engine model meets current levels of exhaust emission regulations for the EPA, EU, and JMOC at time of manufacture.

*** Height without ROPS canopy, exhaust pipe, seat or all easily removed encumbrances.

**** For all other models, refer to standard specalogs.

NOTE: D6R III LGP and D7R II (Standard)

Notes

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