

D6R, D7R

Series II Waste Handlers



	D6R Series II	D7R Series II
Engine		
Engine Model	Cat® C9	Cat® 3176C
Gross Power	141 kW/189 hp	192 kW/258 hp
Flywheel Power	138 kW/185 hp	179 kW/240 hp
Blades		
SU-Blade Capacity	11.2 m³	14.0 m³
U-Blade Capacity	—	16.8 m³

D6R, 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. 5**

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 Flexxairefan Fan, enhanced cab, laminated thermal shields, rear striker bars, engine enclosures, hydraulic and fuel tank guards, ROPS cab, ROPS-mounted air conditioners and condenser fans, cylinder mounted lights, and turbine air precleaner. **pg. 6**

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.

✓ *New Feature*



Recommended Options

- ✓ Several additional options are highly recommended to complement the Waste Handling Arrangement and ensure peak performance. These range from landfill blades to specially designed track shoes and hydraulic rippers. Front striker bars, available on the D7R II are not proposed on the D6R II. **pg. 8**

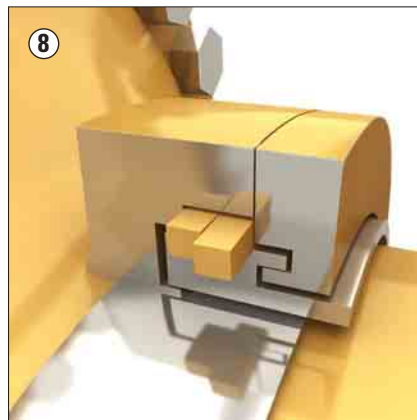
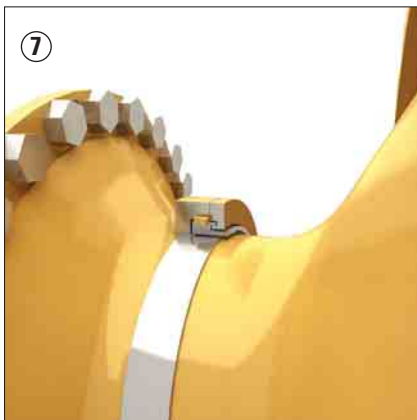
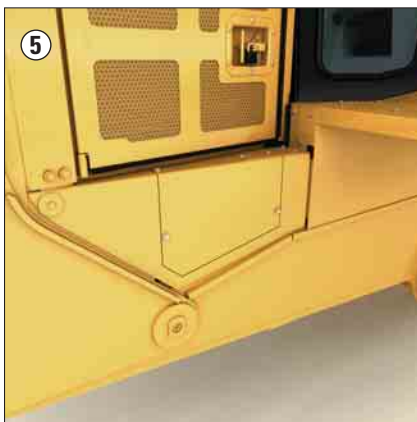
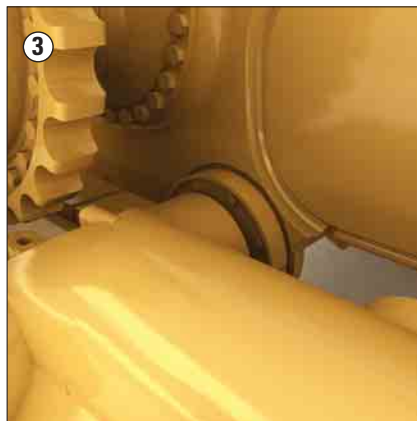
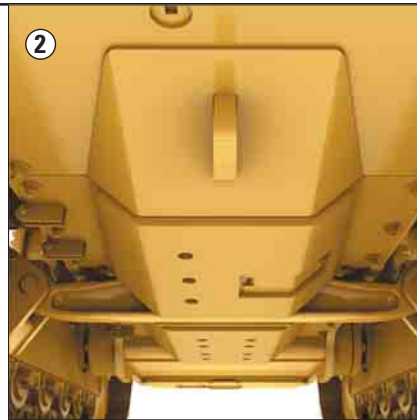
Serviceability and Customer Support

- ✓ The major component modular design concept moves a generation ahead in simplified service and repair. Customer support is unmatched in the industry. **pg. 10**



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.



1 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.

2 Extreme Service Crankcase (belly) Guards. The crankcase (belly) 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.

3 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. The D6R Series II does not have a pivot shaft.

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

5 Chassis Guards. The chassis guards help protect the engine compartment by deflecting debris from risking upward along the chassis. This equipment is standard on the D7R II Waste Handling Arrangement. All along the Fender, Guards are welded on the chassis to prevent debris entry. Not available on the D6R II

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

7 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.

8 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.

1 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. Six supplemental lights are available as an option for the D6R II



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



3 Additional Sealing. To help eliminate debris entry into areas of the machine additional sealing is provided. Key areas include: engine enclosures, hydraulic tank, and battery box for both D6R II and D7R II. Platforms, ROPS support, striker bar box and rear case opening are only available on the D7R II.

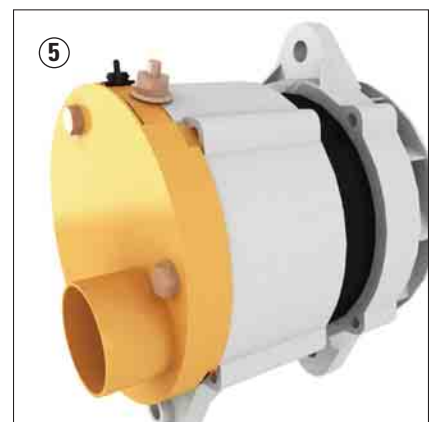


Raised Prescreener. Raised prescreener helps reduce the likelihood of airborne paper or plastics plugging the air intake. It provides a larger air inlet. Part of standard waste handling modification when turbine precleaner is not ordered.

4 Front Lights. The Front Lights are mounted on the top of the bulldozer lift cylinders for the D7R II, on the D6R II they are located on the top internal sides of lift cylinders. These two model configurations allow projecting lights over the trash rack and keeping the lights above the concentrated debris environment for longer service life.

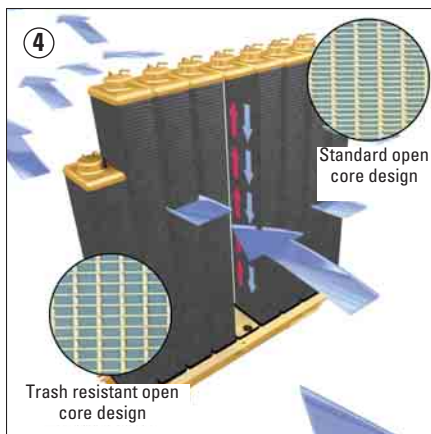
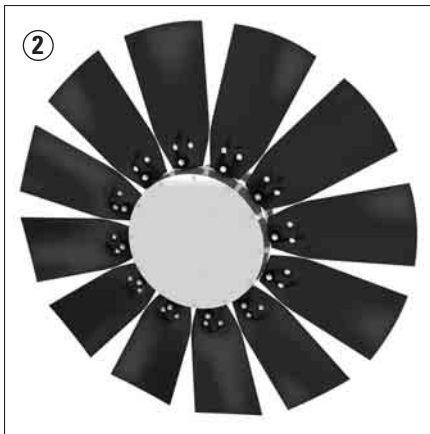
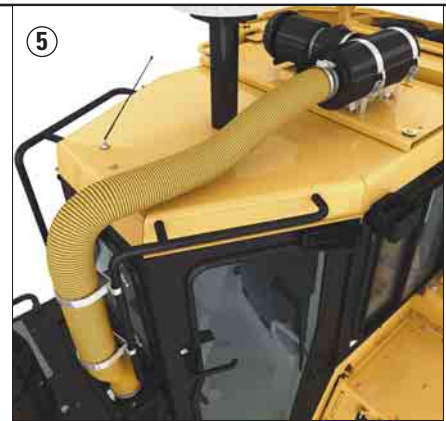
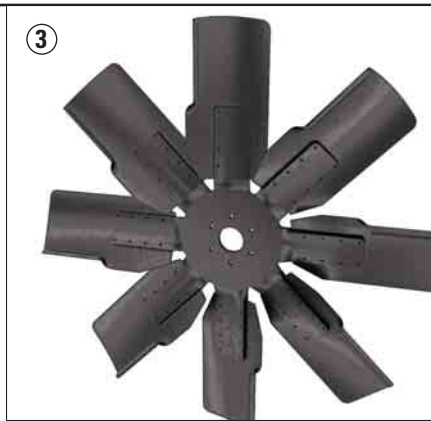
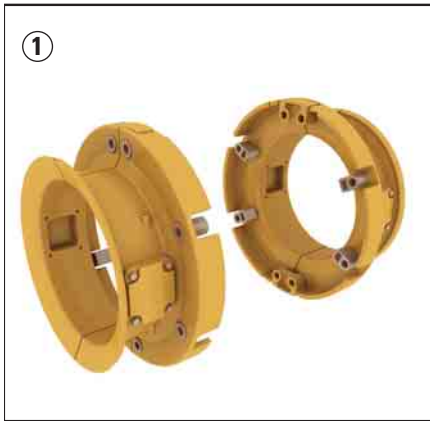


5 High-capacity Alternator. The high-capacity 95-amp alternator provides additional power required for electrical accessories such as supplemental lights and communications and entertainment radios. The ducting helps prevent debris from entering into the alternator.



Required Attachments

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



1 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. This attachment is unavailable for the D6R II.

2 Flexxaire Fan Engine Control System. The Flexxaire 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 Flexxaire fan is controlled by the engine ECM (Electrical Control Module).

3 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. (Not available on the D6R II.)

4 Radiator (AMOCS). 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.

5 Enhanced Cab. The enhanced cab, only for the D7R II, 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.

6 Hydraulic and Fuel Tank guard. The hydraulic and fuel guard helps protect implement hydraulic oil tank, battery box and fuel tank.

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

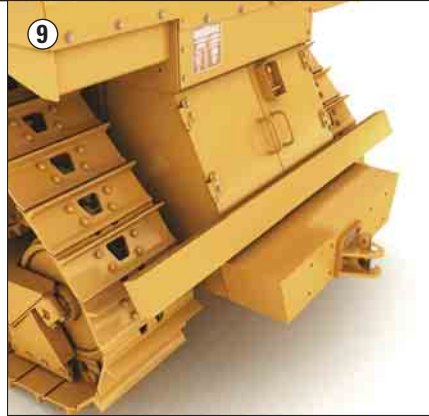


7 ROPS-mounted Air Conditioner Condenser and Fans. The ROPS-mounted air conditioner condenser and fans are mounted to the back of the ROPS to maintain overall machine height.

- InternalMoving 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.

8 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. 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.

9 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.

10 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.

11 Supplemental Cylinder Mounted Lights. The supplemental cylinder mounted lights (four front) are repositioned from the fender/opening to the top of the cylinders. The fender openings are covered with plates to prevent debris from entering. This attachment is not available on the D6R II.



12 Caterpillar Turbine Air Precleaner. The Caterpillar turbine 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.



Front Striker Bars. On the D7R II, the front striker bars angled design prevents debris from ridding up the track and damaging the fenders or fuel and hydraulic tanks. This feature is also available on D6R II WHA with a different design.

Trapezoidal Hole Track Shoes.

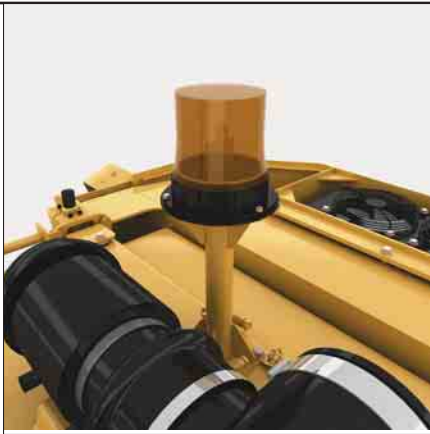
The trapezoidal hole track shoes reduce refuse packing within the track and reduces track chain tightening and accelerated pin and bushing wear. The trapezoidal holes relieve packing by allowing the sprocket to punch out dirt and debris.



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. This is a D7R II exclusive.

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



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 in the left side of the operator seat at knee level, allows the operator to access the disconnect switch quickly. This option is unavailable for D6R II.



Computer Aided Earthmoving System (CAES). The Computer Aided Earthmoving System (CAES), not available for the D6R II, 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.

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.

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.

Complete Customer Support

Unmatched in the industry!

Services. Your Cat dealer offers a wide range of services that can be set up under a Customer Support Agreement (CSA) when you purchase your equipment. The dealer will help you choose a plan that can cover everything from machine and attachment selection to replacement, to help you get the best return on your investment.

Product Support. You will find nearly all parts at our dealer parts counter. Cat dealers utilize a world-wide computer network to find in-stock parts to minimize machine down time. Save money with remanufactured parts. You receive the same warranty and reliability as new products at a cost savings of 40 to 70 percent.

Service Capability. Whether in the dealer's fully equipped shop or in the field, you will get trained service technicians using the latest technology and tools.

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

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 owning and

Operation. Improving operating techniques can boost your profits. Your Cat dealer has training videotapes, literature and other ideas to help you increase productivity.

Replacement. Repair, rebuild or replace? Your Cat dealer can help evaluate the cost involved so you can make the right choice.

Customer Service Agreements. Dealer service response extends to programs such as Custom Track Service (CTS), Scheduled Oil Sampling, and guaranteed maintenance contracts that get peak life and performance from your machine. operating costs over the long run.

Specifications

Model (Standard)	D6R II	D7R II
Flywheel Power	138 kW/185 hp	179 kW 240 hp
Operating Weight (PS)*	20 600 kg	27 920 kg
Engine Model**	Cat C9	Cat 3176C
Rated Engine rpm	2000	2100
Number of Cylinders	6	6
Bore	112 mm	125 mm
Stroke	149 mm	140 mm
Displacement	8.8 L	10.3 L
Track Rollers (each side)	6/7 on (XL)	7
Width of Standard Track Shoe	560 mm	560 mm
Length of Track on Ground	2.62 m	2.88 m
Ground Contact Area (with Standard Shoe)	2.94 m ²	3.22 m ²
Track Gauge	1.89 m	1.98 m
General Dimensions:		
Height (Stripped Top)***	2.26 m	2.56 m
Height (top of ROPS)	3.19 m	3.50 m
Overall Length:		
with Blade	5.11 m	5.82 m
without Blade	4.07 m	4.73 m
Width (over Trunnions)****	2.64 m	2.87 m
Width (without Trunnions – Standard Shoe)****	2.44 m	2.54 m
Ground Clearance	383 mm	416 mm
Blade Types and Widths:		
S	3.36 m	3.9 m
S LGP	3.99 m	4.5 m
SU	3.26 m	3.69 m
U	–	3.99 m
Blade Capacities with Trash Rack:		
S	8.6 m ³	10.9 m ³
S LGP	9.3 m ³	12.3 m ³
SU 11.2 m ³ 14.0 m ³		
U	–	16.8 m ³
Fuel Tank Refill Capacity	383 L	479 L

* Operating Weight: Includes lubricants, coolant, 100% fuel, hydraulic controls, ROPS canopy, FOPS Cab, SU-Blade with 610 mm 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.

D6R, D7R Series II Waste Handlers

HEHT5632 (03/2005) hr

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

www.CAT.com
© 2004 Caterpillar
All rights reserved

CATERPILLAR[®]