

# ARTICULATED DUMP TRUCK



A Product of Hard Work





**An enviable reputation for strength,  
power and performance**

**WORKS HARDER. WORKS FASTER. WORKS LONGER**



Since JCB introduced the popular 712 and 716 in the late 1980s, we've re-launched and expanded our Articulated Dump Truck (ADT) range, bringing you the 714, 718 and, more recently, the 722. The styling of the new range reveals a lot about the design and engineering processes that lie beneath. Built with underlying comfort, reliability and capability in mind, these machines have a justified reputation for strength, power and performance. They also have that unique identity that sets JCB ADTs aside from any others.

The ADT family is an integral part of the JCB Heavy Equipment Range. In line with our Excavators, and Wheeled Loading Shovels, our ADTs provide you with complete material handling solutions that have been tried, tested and proven over the years.

Whatever your need or application, wherever you are around the world, our ADT machines will always provide you with the power, reliability and efficiency you need to get the job done quickly, safely and profitably.

# 722 – New levels of power and performance

270hp turbocharged 6-cylinder engine

Constant 6-wheel drive and limited slip differentials on all drive axles

6-speed forward and 3 reverse gears with manual or automatic operation

A maximum speed of 46kph forward and 32kph in reverse improves cycle times

Dry disc dual braking on all wheels with exhaust brake

20 metric tonne payload capacity 25° scow angle and 74° body tipping give effective material discharge



It's all about supply and demand. The market demands a machine like this remarkable 22 US short ton ADT.

You asked for power. This machine gives you a 6.7-litre, 6-cylinder, 270-horsepower push. You wanted traction. The 722's constant 6-wheel drive, inclusive of limited slip differentials on all drive axles, makes sure you never get stuck in the mud.

And where would you be without speed? Along with its powerful engine, the 722 has a Smoothshift 6-speed forward, 3-speed reverse transmission so it can reach top speeds of 46kph in forward gear and a maximum of 32kph in reverse.

When you're going this fast you also need to know you can slow down. That's why we've incorporated dry disc braking, with single caliper actuation per disc on all wheels, and an exhaust brake.

When it comes to capacity, the 722 can accommodate up to 20 metric tonnes in its rear body. Add this to a combination of a 74° tipping angle, a 25° scow and a tipping time of 13 seconds fully laden, and you can see why this machine's extremely effective at material handling.

But all this hard work doesn't mean you have to sacrifice comfort. With front axle suspension and an A-frame bogie beam rear suspension, rider comfort on the 722 is second to none.

So, you've got power, control, comfort, the ability to operate where other heavier machines can't, plus simple management systems that are straightforward to monitor and maintain. It all makes the JCB 722 exactly what you've been asking for.





# 718 – A powerful mid-range performer

177hp turbocharged 6-cylinder engine

Selectable 2 or 4-wheel drive and limited slip differentials on all drive axles

6-speed forward and 3 reverse gears with manual or automatic operation

A maximum speed of 40kph forward and 26kph in reverse

Dry disc dual braking with single caliper actuation per disc on all wheels

18 US short ton payload capacity, 25° scow angle and 84° body tipping give effective material discharge



The 718 is unlike any other machine in the marketplace. It has the ability to carry a heavier payload (up to 16.33 metric tonnes in the back) than its smaller brother, the 714, but at the same time it's still a lot lighter than a number of its contemporaries. This gives you huge benefits in terms of superior manoeuvrability and minimal ground damage.

With a 5.9-litre, 6-cylinder turbocharged engine, producing 177hp, the 718 has the power. But it also allows you to achieve maximum traction control while on the move, thanks to 2 or 4-wheel drive selection at the touch of a button added to limited slip differentials on all drive axles.

To improve your cycle times, both on and off site, we've introduced a JCB Smoothshift transmission. This means that while roading unladen, the 718 can reach a top speed of 40kph in forward gear and 26kph in reverse. Safe and efficient stopping is achieved using effective dry disc braking on all four wheels. And, with an improved 84° tip angle, the 718 really does give you excellent material discharge.

Then there's operator comfort. For the smoothest ride, the 718 is fitted with a patented JCB suspension system that also enables the machine to cope with the more demanding conditions associated with heavier loads.

Power, manoeuvrability, performance, comfort ... all in all, the mid-range 718 is just the job.





# 714 – Small machine, big performer

156hp turbocharged 6-cylinder engine

Selectable 2 or 4-wheel drive and limited slip differentials on all drive axles

6-speed forward and 3 reverse gears with manual or automatic operation

A maximum speed of 46kph forward and 32kph in reverse improves cycle times

Dry disc dual braking with single caliper actuation per disc on all wheels

14 US short ton payload capacity, 25° scow angle and 84° body tipping angle give effective material discharge



At the smaller end of the scale we bring you the 714. It's an advanced, 14 US short ton machine that packs all the power, versatility and speed you need to get the job done.

With the ability to carry 12.7 metric tonne, the 714 is the perfect small machine to use where you need maximum manoeuvrability, often in access-restricted areas, but you also need to make sure there's minimum ground damage. The machine body is extremely strong and durable and, with a scow angle of 25° and body tipping angle of 84°, it's hard to beat when it comes to material handling.

This makes the 714 great for site preparation, hauling applications in urban developments, golf course construction, landscaping, land contouring and rental operations.

Driven by a 5.9-litre engine producing 152hp, the 714 also features optional 2 or 4-wheel drive that you can select on the move at the touch of a button, so you can always get out of awkward situations.

An incorporated Smoothshift transmission and powerful engine means the 714 can reach speeds up to 40kph, making sure you achieve excellent results in good time. Plus, you can slow down and stop in total safety thanks to caliper braking on all four wheels.

It all makes for a machine that's big on everything, except size. Add this compact performer to the mid range, powerful 718 and the innovative 722, and you can see that JCB have an ADT you can trust to get the job done efficiently, effectively and profitably, whatever the application.







## Cab

2 man cab for safe operator training.

Air conditioning fitted as standard.

Simple controls ensure easy operation.

Excellent all round visibility for safe operation.

Optional reversing camera.

## Service Access

Single piece engine cover hinged at cab for excellent service/maintenance access.

Hinged cooling pack simplifies maintenance and helps ensure maximum cooling efficiency.

Battery isolator located conveniently at cab access.

Ground level access to all grease points helps to encourage routine maintenance.

IP69 electrics maximising system integrity and protection.

EMS monitoring system.





### Body

74° tip angle provides full discharge.

High tensile steel body ensures reduced wear and long life.

Optional, self-opening mechanical tailgate (718/722).

### Fabrication

Robust and durable chassis design gives long service life.

45° articulation provides excellent manoeuvrability.

Oscillation of rear chassis independent of front for safety and positive ground engagement.

Front and rear recovery hitch points.

### Driveline

Powerful engine – high power to weight ratio.

Fully automatic 'Smoothshift' transmission ensures simple operation machine drive to conditions.

714/718 4- or 2-wheel drive, 722 6-wheel drive with lock up differentials.

Limited Slip Differential (LSD) axles standard ensuring excellent traction.

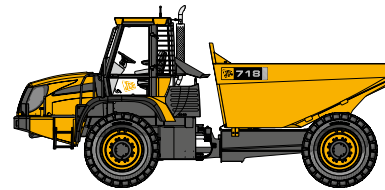
Fully suspended front axle (718/722) for comfort and speed.

Choice of tyre options to suit differing ground conditions and applications.

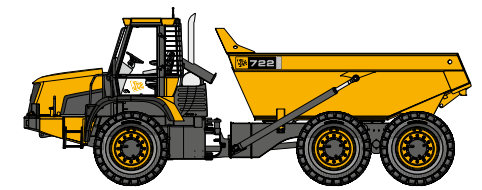
ADT 714



ADT 718



ADT 722



Gross power to SAE J1995/ISO 14396	kW (hp)	112 (150)	129 (173)	194 (260)
Maximum torque	Nm	617	786	990
Transmission		Smoothshift ZF 6WG160	Smoothshift ZF 6WG160	Smoothshift ZF 6WG210
Braking		Dual-circuit dry disc on all wheels	Dual-circuit dry disc on all wheels	Dual-circuit dry disc on all wheels / exhaust brake
Suspension – front		Fixed	4-bar parallel link with single acting struts	4-bar parallel link with double acting struts
Suspension – rear		Fixed	Fixed	A-frame with rocking beam
Body Volume – heaped	m <sup>3</sup> (yd <sup>3</sup> )	7.35 (9.6)	9.6 (12.56)	12.0 (15.7)
Load capacity	tonnes (lb)	13.14 (28969)	16.33 (36000)	20 (44092)
Tipping angle	degrees	84	84	74
Articulation angle	degrees	36	40	45





A few words about JCB

# A history of innovation



Sir Anthony Bamford – Chairman

**A family business.** JCB is no ordinary business. From the dreams of one pioneering man, Mr Joseph Cyril Bamford, we have grown into the world's biggest privately owned construction equipment company by volume - a globally recognised brand with a reputation for innovation. Since 1945, the same attention to detail, passion for progress and committed family spirit has taken us from strength to strength.

Ours has been a history of groundbreaking developments. In 1953 we were the first to introduce the revolutionary backhoe loader, now a market leader across the globe. From the first ever full-suspension tractor, to the safety landmark of the side-entry skid steer, we have kept on leading and innovating ever since.

We know how vital it is to get ideas to market fast, so our customers have the very best equipment at their fingertips, and because we are still the family-run business we have always been, we can make bold long-term decisions about things we believe in.

**A truly global company.** Nowadays JCB operates across all five continents, manufacturing at 18 factories in the UK, Brazil, Germany, China, North America and India.

**A commitment to our customers that goes on and on.** That's a fact we remind ourselves of constantly, and it's the reason our customers are at the heart of everything we do. Whatever a customer needs, we make it our mission to provide a complete solution.

But legendary service is about more than responsiveness. It's about anticipating new needs, offering solutions and exceeding expectations. With that in mind, we are always seeking out improvements that guarantee quality in everything from our products to our working practices.

**The JCB Dieselmax engine: a great engineering achievement.** Evidence of our focus on innovation, customer needs and global thinking doesn't come much more powerful than our revolutionary JCB Dieselmax

engine. Having grabbed the headlines when the car smashed the world land-speed record at 350.092mph, it is now providing our customers with tomorrow's performance today.

**World-class innovation.** Our business has always been driven by innovation, using only the most advanced technology, components and processes, meticulous design and rigorous testing. We continue to invest heavily in research and development as the key to our progress. This commitment not only enables us to find new solutions for new markets, but also to constantly improve practices, keep manufacturing lean, minimise environmental impact and make our machines more productive, powerful and profitable.

We have won numerous awards for our innovative designs and are renowned for cutting-edge systems and product excellence. We are now proud to offer over 300 machines – we are the global number one in backhoe loaders and telescopic handlers, we have the world's largest range of compact equipment and we now offer the advanced JCB Vibromax compaction range. Every machine we make is continuously enhanced to ensure our products remain cutting-edge and class-leading.





**Committed to a cleaner world.** At JCB we recognise that the climate and the environment are changing. As a manufacturer of working machinery, operating in both established and emerging markets, we accept the challenge of helping to deliver economic and environmental sustainability.

Product innovations that provide the right solutions to our customers have been a vital part of our history and will be key to our sustainable future. We have introduced the world's first automatic lock-up torque converter, cutting fuel consumption by up to 25%. Further to this development we are also investigating and researching a number of alternative drive technologies to complement our B20 biofuel capability.

In addition to developing cleaner and more efficient machines, we have a commitment to ensuring our manufacturing facilities meet the highest environmental standards.

**Sustainability in all we do.** We search every part of our business to find areas for improvement, whether that's monitoring water usage, managing energy, minimising hazardous materials or supplier development. We currently recycle over 80% of all waste generated and we are aiming for zero to landfill by 2010. 80% of materials supplied are from ISO 14001 accredited companies. 95% of all machines are designed to be remanufactured for future use. It's all part of our pledge to minimise the need for raw materials and reduce waste.

**Taking care.** Companies don't operate in a vacuum, they're an integral part of communities big and small, local and international. JCB understands that we have the opportunity to improve people's lives, not only with our world-class products but also through our actions as good neighbours and responsible corporate citizens. We make sure that wherever JCB has a presence, it's a positive one. All our factories are built in harmony with the surrounding environment. In addition, our Lady Bamford Trust Center has provided better school facilities for children in rural India.

We have provided an instantaneous response to devastating disasters, such as earthquakes in Turkey, Pakistan and China, mudslides in Mexico and the Asian tsunami – for which JCB provided more than £2m worth of machinery to support relief efforts.



## Environmental and social responsibility



# The best back-up in the business

**Wherever you are, we are.** Our mission to provide world-class support and deliver 100% satisfaction reaches into more than 1,500 dealer depots, spanning 150 countries across five continents. The aim? To bring you global expertise at a local level. We truly believe no other manufacturer does more to understand the subtle differences between one region of the world and another. It's a degree of attention that we maintain at every level of the company and an assurance to our customers that wherever they are in the world, JCB will fulfil their needs.

**Trust the genuine article.** At the heart of the support network is our impressive World Parts Centre, a state-of-the-art facility operating 24/7 to dispatch more than a million genuine parts and attachments every week to our dealers and international distribution centres. Because we understand the need to minimise downtime, we utilise the latest logistics and warehouse management systems and have committed to an "Anywhere in 24 hours" strategy.

**Keeping you up and running.** Just as important as genuine JCB parts are the people who fit and maintain them. Our JCB-trained technicians in all of those 1,500-plus dealer depots provide excellent, expert customer care, whether it's routine servicing or something more urgent. If there is an emergency breakdown situation, we need to act fast. This is why all our dealers operate their own fleets of support vehicles, enabling parts to be delivered quickly and fitted expertly, and fulfilling our promise to keep our customers working.

**Advanced technology.** At JCB, we are constantly looking at new, innovative ways to help you get the most out of your machine. Our latest development is JCB LiveLink, an advanced telematics system using satellite and cellular technology that enables you to better protect your machine and accurately monitor and improve its performance. Using LiveLink can benefit your business in many ways, from increasing the

security of your machines to improving fleet utilisation. It can also enable your JCB dealer to view your machine and guarantee timely servicing of your fleet, improving uptime.

**Maximising earning potential.** We grow as our customers grow. That's why, at JCB, we are committed to offering expert financial advice and support to help customers maximise their earning potential.

Finance options\* are available for new and used machinery, all part of our dedication to helping customers preserve their working capital while spreading costs in the most effective and tax-efficient way.

And as well as financial help, we are also happy to offer JCB Insurance.\* We specialise in construction and industrial insurance and in offering Insurance Premium Finance facilities.

*\* Please check individual countries for available services.*







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Download the very latest information on this product range at: [www.jcb.com](http://www.jcb.com)

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