

FOCUS

COMPACT LOADER SPECIAL EDITION



THE SINGULAR FOCUS
OF KCM. THE GLOBAL
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CONSTRUCTION
MACHINERY GROUP.

KCM COMPACT WHEEL LOADERS



REPUTATIONS
ARE BUILT ON IT

- 30ZV-2 and 40ZV-2
- 42ZV-2 and 45ZV-2
- Sensible Maintenance, Maximum ROI – Tips for Keeping Your Compact Wheel Loader Running Long and Strong

NEW, FEATURE-PACKED COMPACTS



| | | | | |
|---------------|--------------|------------------------|---------------------------|----------------------------------|
| 30ZV-2 | 30 HP | <small>22.2 Kw</small> | .52 Yd³ | <small>.40 M³</small> |
|---------------|--------------|------------------------|---------------------------|----------------------------------|

| | | | | |
|---------------|--------------|------------------------|---------------------------|----------------------------------|
| 40ZV-2 | 45 HP | <small>33.6 Kw</small> | .65 Yd³ | <small>.50 M³</small> |
|---------------|--------------|------------------------|---------------------------|----------------------------------|

 "This new KCM half-yard wheel loader comes to North America as a proven performer in multiple markets worldwide."

—Brad Belvins, Product Specialist, KCM Corporation

Since the onset of the Hitachi/Kawasaki joint partnership in 2015, the Kawasaki, now KCM, loader offering has expanded to include compact articulated wheel loaders from 1.18 cu. yd. capacity to as low as 0.78 cu. yd., with Kubota diesel engines and Hitachi computerized hydraulic controls. Hitachi has partnered with Kubota for decades.

Introduced during CONEXPO 2017 were two more KCM compact

loaders, the 40ZV-2 and 30ZV-2. Both excel in productivity and features, with capacities of 0.65 cu. yd. and 0.52 cu. yd.


The larger compact wheel loaders, the 45ZV-2 and 42ZV-2 models, have already earned reputations for great productivity and feature comfort. The new 40ZV-2 and 30ZV-2 are guaranteed to provide similar results.

Same Technology as Larger Models.

Large Kawasaki, now KCM, wheel loaders are built to be tough and efficient as well. The compact models follow the same protocol as the larger models.

Both the larger and the smallest new models feature load-sensing, electronically controlled hydrostatic transmissions. The same digital feeds provide information to an electronically controlled, variable-load-sensing bidirectional hydraulic pump.

Unlike the larger KCM models with multiple gears, these smaller models only have two: forward and backward. But they can either creep around close quarters or zip up to 9.3 mph. At any speed the travel mode switch offers the most efficient mode for travel or work conditions. The wraparound counterweight lowers the center of gravity, increasing stability and offering a smooth, balanced ride.

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- Easy access to filters, drains, and fittings
 - Side-by-side aluminum radiator and aluminum oil cooler provide easy access for maintenance and cleaning



All controls are ergonomically designed for easy access and operation.

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Great Features.

First of all, both models have real climb-in cabs designed to the same specifications as larger KCM wheel loaders. This includes air pressurization for hazardous applications, cooling and heat, AM/FM radio, plus audio sync for audio input.

Second, both models have standard quick-attach change from one attachment to another, full security lighting, limited slip differentials for slick-going, and 3-spool hydraulic valving with piping and control lever.

Third, both have an automatic bucket leveler and single-level hydraulic control. Plus there's an adjustable seat control and smooth workflow.

The ride in an articulated compact wheel loader, compared to a skid-steer loader, is smooth. Turns are direct, with immediate response. Additionally, there are multiple yard applications in which a KCM compact loader can outperform a standard mast forklift.

It's simple. There's a place for compact wheel loaders in today's world of skid-steer machines and mast forklifts used in outdoor yard applications.

Contact your local KCM dealer to learn more about these proven performers. Or visit www.KCMCORP.com. ◀

COMPACT WHEEL LOADERS

UPSCALE FEATURES

IN SMALL-SCALE LOADERS

42ZV-2

45 HP 33.6 Kw .78 Yd³ .60 M³

45ZV-2

61 HP 45.6 Kw 1.18 Yd³ .90 M³



Built with all the performance and reliability of the larger KCM wheel loaders, but in a smaller package, the 42ZV-2 and 45ZV-2 are quickly becoming indispensable for a wide variety of jobsite venues. Both are available with the hydraulic quick coupler—standard on the 42ZV-2 and optional on the 45ZV-2.

Standard on each model

- Quick coupler
- Z-type linkage
- Third-spool hydraulics
- Heavy box frame
- Bucket leveler
- HN bushing technology
- Adjustable suspension seat
- Kubota engine (Tier4i emissions compliant)
- High ground speed

In addition, a wrap-around counterweight lowers the center of gravity for greater stability. The automatic parking brake engages when the engine stops. There's easy access to the cab area from both sides of the machine. And a pillar-less design offers unobstructed visibility from the operator's seat.

KCM compact wheel loaders are also easy to service. A pneumatic "one-touch" engine compartment requires no effort to open. Side-by-side aluminum radiator and aluminum oil cooler means easy access for maintenance and cleaning. Filters, drains, and fittings are easy to reach too. The fuel filter even has a built-in water separator.



Optionally available are: rubber-mounted ROPS/FOPS cab to reduce noise and vibration, HVAC, mechanical coupler, and radiator dust shield.

Quick lesson on quick couplers

The standard hydraulic quick coupler on the 42 is actually a universal coupler. This allows skid steer attachments, along with hundreds of others that use universal brackets, to fit on the 42ZV-2, greatly increasing its versatility. Keep in mind that universal coupler attachments built for skid steer use may have problems working with a wheel loader, as the hydraulic power, roll back, and jump angles are completely different.

The 45ZV-2 comes standard with a hooktype coupler, similar to the larger models that typically do not use skid-steer type attachments. Due to the fact that there are a multitude of attachments available on the market, with various coupler bracket configurations, it is recommended you purchase the appropriate attachments with the 45ZV-2 to assure a good fit.



Quick Coupler and Third Spool Hydraulics are standard on all KCM compact loaders 30Z-2 through the 45ZV-2. The 30ZV-2 through the 42ZV-2 feature a universal coupler, standard, and the 45ZV-2 offers a universal coupler, optional, to utilize skid-steer attachments.

We have worked with Paladin to design forks and other attachments that use a hook-type coupler. However, as an option, the 45 can be equipped with a universal coupler, also built by Paladin, that is designed to handle the increased hydraulic power of our compact loaders.

Before fitting any loader with an attachment check with your local KCM dealer.

For more information about the KCM Compact Wheel Loader line-up, go online to www.KCMCorp.com/compact_loaders or stop by your local KCM dealer.

SENSIBLE MAINTENANCE, MAXIMUM ROI

Tips for Keeping Your Compact Wheel Loader Running Long and Strong

We'll get into tips and details soon, but let's start with a general preventive maintenance schedule for compact wheel loaders. These are not all inclusive and are only guidelines, so be sure to follow the manufacturer's recommendations for all maintenance procedures on your specific machines. You can start with the owner's manual, but the most current information will be available from your dealer or the manufacturer's website where updates and technical service bulletins will be applied. Unless otherwise noted, these are intervals, not one and done, so 50-hour tasks are done every 50 hours, 100 hour tasks every 100 hours, etc.

Start of Each Shift

- Levels of all fluids including fuel, coolant, hydraulic fluid, brake fluid, engine oil and DEF, where applicable
- Check tire pressure and check tires for damage and wear
- Check all safety systems

End of Each Shift

Remove all debris, giving special attention to the engine, grille screens and radiator cooling screen. Check for loose, damaged or missing parts.

After the First 50-100 Hours

Adhere to the manufacturer's recommended procedures following break-in. Because manufacturing facilities have become so clean, some manufacturers have greatly reduced the number of procedures required here or have even eliminated this step altogether.

Every 50 hours

- Check quick-attach or loader pins
- Check and service air pre-cleaner (if so equipped)
- Check tension and condition of drive belts
- Lubricate all zerks plus all hinges, pivots, etc.
- Check fuel/water separator and drain as needed
- Check function of all lights and indicators
- Check for leaks in fuel, cooling, hydraulic, drive and brake systems

Every 100 hours

- Thorough inspection of the entire machine
- Check restriction indicator on air filter; clean filter element if the indicator has tripped
- Check condition of brake pads and replace as needed
- Check torque on all threaded fasteners
- Check for chafing and pinching on the wiring harness
- Check condition of all hoses
- Clean battery terminals
- Check battery electrolyte level, assuming the battery has removable caps
- Check play in brake and clutch pedals and adjust as needed

Every 250 hours

- Change engine oil and filter

Every 500-1,000 hours

- Change fuel filter
- Change hydraulic and transmission gearbox oil and filters
- Check torque on all threaded fasteners (initial torque check should be at 100 hours on new or rebuilt equipment)

Annually

- Flush and refill cooling system
- Replace air cleaner elements
- Change axle oil

First Thoughts

A compact loader can have an "open" roll-over protective structure (ROPS), a heated cab or a fully air-conditioned cab. Obviously with an AC system, there are some periodic maintenance items that do not exist with an open ROPS. There are a few things to check periodically such as compressor belt tension and condition, refrigerant charge, the cleanliness of condenser fins and cleaning the recirculation filter. If cooling effectiveness drops and the maintenance steps above do not resolve the problem, the system may need additional service.

When servicing an AC system, keep in mind that the refrigerant must be approved by the EPA and, with the exception of R-744, cannot be intentionally released (vented) to the environment. When payment of any kind is involved (including non-monetary), any person working on the system must be certified under section 609 of the Clean Air Act and they must use approved refrigerant handling equipment. Refrigerant must be properly recycled or reclaimed before it can be reused, even if it is being re-turned to the vehicle from which it was removed. Other rules apply, but these are the key considerations. If you don't have the resources to do your own work, AC shops will do this as a mobile service.

Axles and tires are the link to get the power to the ground and carry the load. Axle maintenance is pretty straightforward; make sure the mounting bolts to the chassis and wheel rims are retorqued as required in the owner's manual and change the axle oil. The axle oil will also accumulate some wear metals and contaminants from the air. Changing the oil is the only way to purge the contaminants and replace the necessary additives in the axle oil. Axle oil changes are very simple and straight forward. Be sure to use a high-quality oil as recommended in the manual.

Use the Right Products

Using bargain fluids and will-fit parts is false economy. As engines and hydraulic systems have become more sophisticated, they have also become more exacting in the products

they require, and using the wrong product can have disastrous consequences. For example, there are four current categories of diesel engine oil (CH-4, CI-4, CJ-4 and CK-4) for engines designed to meet various non-road emissions standards plus another, FA-4, that is meant for on-highway vehicles meeting 2017 greenhouse gas emissions standards. You'll find the oil category plus other information, including viscosity, in the API "donut" on the oil container. There are multiple types of coolant (antifreeze). Inorganic Acid Technology (IAT) is the old standard, what used to be referred to as ethylene glycol antifreeze. Organic Acid Technology and Hybrid Organic Acid Technology (OAT and HOAT) are long-life or extended-life coolants. Despite claims of product-specific compatibility, it's best to not mix coolant types.

Likewise there is an almost endless array of different greases based on consistency (NLGI class), thickener type, application (chassis fittings versus lift linkage, for example) and other factors. Choices in hydraulic fluid are as numerous as those for grease. Product information is in the owner's manual for your loader, but unless you're a dealer you might not have the latest information. Check the manufacturer's website for current product recommendations.

Keep It Clean

Cleanliness is essential in obtaining full service life from loaders and in minimizing owning and operating costs. Reversing fans, swing-out coolers, water separators and filters are among the components having roles in cleanliness and should be serviced as required.

Hydraulic oil in a compact loader is shared between the hydrostatic (HST) drive system and the hydraulic system to steer, raise the loader and tilt the attachment. Since the compact loader is a Jack-of-all-trades, it can have many attachments on the front end. Contamination can come from the environment (dust, dirt, mud, water), from within the machine's systems (wear metals, seal particles) and from an attachment. Faulty breathers and failing seals can let in a lot of contamination as the system heats up and cools down during and after operation.

The hydraulic system is sealed and pressurized to prevent the entrance of airborne dust particles. The oil from the HST system has an easy-to-change, spin-on filter; the hydraulic system also has a spin-on return filter. And finally, there is a suction strainer in the bottom of the hydraulic tank. These three items combine to stop any particles that came in with the oil, come from the hydraulic components or may have gotten in with the air that occurs when the system is opened to atmosphere.

This article is provided by KCMA Corp., a subsidiary of Hitachi Construction Machinery Group.



KCM REPUTATIONS
ARE BUILT ON IT

THE RIGHT EQUIPMENT, THE RIGHT PEOPLE

OUR BEGINNINGS. The origin of KCM loaders dates back to 1962, when Kawasaki Heavy Industries built its first articulated wheel loader in Japan. When the loaders were introduced to the North American market 16 years later, the enthusiastic reception they received helped both broaden the scope of the product and expand the network of dealers dedicated to providing you with the finest equipment and support possible.

OUR PROGRESS. In 2010, Kawasaki entered into a joint venture with Hitachi Construction Machinery (HCM)—a partnership that successfully combined the technological and manufacturing resources of both companies to deliver to customers superior products and support. HCM purchased KCMA from Kawasaki in 2016, and today, as a subsidiary of one of the largest construction machinery companies in the world, KCMA is securely poised as your go-to source in the North American wheel loader market.

OUR FUTURE. KCMA's focus remains on building trust with you—our dealers and customers. From engineering to manufacturing and support, this single-minded focus will keep you running, productive, and profitable. One more way that, every day, KCMA enables you to meet your deadlines, hit your bottom line, and honor your commitments.

A FULL LINE OF WHEEL LOADERS

16 MODELS

.52–9.15 CU. YD.

30 HP–531 HP

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COMPACT LOADERS

KCM REPUTATIONS
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30ZV-2 40ZV-2 42ZV-2 45ZV-2



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THE SINGULAR FOCUS OF KCM. THE GLOBAL STRENGTH OF HITACHI CONSTRUCTION MACHINERY.

Your work is more than just what you do. It fulfills an agreement with your customers, and their customers. It honors a commitment and proves your word is your bond.

For over 35 years KCM has engineered integrity into our wheel loaders. Whether you build it, move it, or produce it, your work has one purpose: to honor the promises you've made.

At KCMA, we understand that we are building something far greater than a relationship, we're building your reputation

PROMISES KEPT



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• 30 HP-61 HP

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