WHEEL LOADER

Direct-injection, turbocharged 118kW (158hp) engine
Operating weight 13 ton, Bucket capacity 2.0-3.0 m³
Strong and robust main structures
Tough and proven hydraulic components
Productive and dependable performance
THE ADVANCED TRADITION
SIMPLE
DURABLE
DEPENDABLE
The outstanding performance of Kawasaki wheel loaders has been proven all over the world.

Continuous improvement in quality since its release in 1994, the ZIV-2 wheel loaders offer long service life and outstanding productivity.

Kawasaki, a major Japanese manufacturer of wheel loaders for over half of a century combines innovative technologies and real world experience to produce the finest wheel loader in the industry.

Simple and straight forward, Kawasaki eliminates excessive functions to enhance productivity, durability, reliability, and lower operating costs.

Overall simple design makes maintenance easier and reduces costs.

Kawasaki focuses on simple, minimized electronic designs to offer the highest reliability and the easiest maintenance with minimum down time.

"Kawasaki Made" major components such as the transmission, axle and hydraulic valve are developed and manufactured by experienced personnel that concentrate their knowledge and technologies to produce the best components for Kawasaki wheel loaders.
**SOPHISTICATED PERFORMANCE**

**JAPANESE ENGINE WITH MECHANICAL GOVERNOR**

Japanese engines provide a high quality source of power. Time-proven, high quality mechanical engine governor minimizes maintenance requirements. Compared with electronic controlled high pressure fuel injection system, a wide range of fuel and engine oil can be used. The engine does not require any special diagnostic equipment or computer for service.

*For the range of fuel, please consult your local Kawasaki dealer.*

**CENTER PIN**

Kawasaki center pin design is rugged and durable, providing thousands of hours of trouble free operation. The spherical bearing mounted on the lower center pin area absorbs heavy stresses caused by digging.

**TPD**

Standard Torque Proportioning Differentials (TPD) improve traction in slippery conditions.

**LSD (OPT)**

For applications with extreme traction requirements, the optional Limited Slip Differential (LSD) provides additional traction capability.

**LOAD SENSING HYDRAULIC SYSTEM FOR STEERING LINE**

An energy efficient design of the hydraulic system provides for steering flow to supplement the main circuit once steering demand is met. This allows for full utilization of the pump capacity for efficient operation in all conditions.
**WET DISC BRAKE**
Outboard mounted wet disc service brake can minimize maintenance time since the brakes are accessible without removing the axle.

**PARKING BRAKE**
The parking brake is a spring-applied, air pressure-released, drum type. Based on this proven design, parking brake maintenance and adjustment can be easily done.

**DOUBLE-ELEMENT AIR CLEANER**
The double-element air cleaner filters the outside air to supply clean air for the engine. Accumulated dust is automatically discharged through valves when the engine stops.

**TRANSMISSION**
Fewer parts and the simple structure of the counter shaft transmission minimizes maintenance time and cost. Transmission control can be done by using simple, twist grip, single lever which helps an operator to focus on bucket operation.
BEST OF BOTH WORLDS, PRODUCTIVE AND DEPENDABLE

HOIST ARM & BUCKET
With strong and robust hoist arms and linkage, Kawasaki loaders perform well in a wide variety of applications. High breakout force and excellent bucket rollback mean bigger loads and better load retention. Buckets are designed for easy loading and are equipped with bolt-on cutting edges or teeth for easy changing. The bucket leveler and boom kickout are standard.

SEALED BUCKET HINGE PIN
The special seal in the bucket hinge pin provides excellent sealing and grease retention which extends pin life.

FULL BOX FRAME CHASSIS
Full box section frame is the strongest in the industry and resists twisting loads better than plate frames.

BUFFER RINGS IN HYDRAULIC CYLINDER
The hydraulic cylinders utilize a buffer ring to improve sealing capability to reduce leakage.

RIDE CONTROL (OPT)
Ride Control provides stable load handling during load and carry operation. It reduces bouncing of the equipment while traveling, improves safety, productivity and operator comfort. The system comes with speed sensitive, automatic on/off feature.

HYDRAULIC GEAR PUMP
A proven gear pump is the heart of the hydraulic system. The durable and dependable design of this gear pump provides excellent performance. Gear pumps are dirt-tolerant and heat resistant even under extremely tough job conditions. Its simple structure makes maintenance cost low.

INCREASED GREASING INTERVALS FOR UNIVERSAL JOINTS
Sealed universal joints only require greasing every 12000 hours. This reduces maintenance costs significantly and provides greater durability.
EASY ACCESS SIMPLIFIES SERVICING

EASY MAINTENANCE FOR COOLING SYSTEM
A radiator sub-tank is installed in the cooling system to automatically replenish the water in the radiator. It is easy to check the water level and maintain the water supply.

SIMPLE & EFFICIENT, ONE-TOUCH OPEN-TOP RADIATOR GRILLE
To facilitate cleaning the radiator, the radiator grille swings open with pneumatic support gas springs.

EASY-ACCESS GREASING POINTS AND ENGINE OIL DRAIN PLUGS
All greasing points are easily accessible from the ground, and the engine oil drain plugs are located at the lower side of the chassis so they can be opened and closed easily.

HIGH QUALITY FINISH PAINT FOR SHEET METAL PARTS
Kawasaki’s state-of-the-art painting process utilizes ED (Electro-Deposition) primer, a baked Melamine Alkyd finish coat as well as a fluoric super protection coat for a durable and attractive finish.

LADDERS ON BOTH SIDE
Ladders on both sides of the machine allow for easy access to the operator area. Steps and hand rails are located for safe access.

HALOGEN HEAD LAMPS (OPT)
Front and rear working lights are bright, halogen lamps for improved safety and visibility.

LED REAR LAMPS (OPT)
Long life, LED (Light-Emitting Diode) lamps are available as an option for the rear tail lights. These lights are very bright and durable.
THE COMFORT ZONE
"NO OTHER PLACE LIKE THIS CAB"

CAB (OPT)
The "walk-through" CAB utilizes curved glasses for front and rear windshields to provide excellent visibility. The front and rear glass is mounted in rubber gaskets that make windshield replacement fast and easy.

ROPS/FOPS CAPABILITY (OPT)
The operator’s cab is fully certified to meet ROPS (Rollover Protective Structure) and FOPS (Falling Object Protective Structure) regulations.

AIR CONDITIONER (OPT)
The air conditioner keeps the operator comfortable in a wide range of climates.

OPERATING SEAT
The 70ZIV-2 provides many operator comfort features. The seat with armrests is fully adjustable for height, position and suspension. The ergonomic design incorporates critical balances between seat location and visual position, steering wheel, pedals and levers to make the machine easy to operate.
**TILT STEERING**
The tilt steering column adjusts to fit a variety of operator needs and offers greater comfort and efficiency.

**DOWNSHIFT BUTTON**
The downshift button located on the boom control lever provides for quick, convenient downshifting from 2nd gear to 1st gear.

**AT-A-GLANCE METERS AND GAUGES**
The exact conditions of the machine can be instantly checked from the gauges and indicator lights on the instrument panel; speedometer, engine water temp. gauge, transmission oil temp. gauge, fuel indicator, air pressure gauge, engine hour meter, and various other warning and indicator lights.

**VISCIOUS MOUNT**
Viscous mounting of the cab effectively reduces noise and vibration that provides greater comfort for an operator.

**BOOM AND BUCKET CONTROL LEVERS**
The pilot operated hydraulic control levers with wrist rest give the operator better control. Downtime can be minimized, thanks to the simplified mechanical structure.
OPERATING SPECIFICATIONS

Engine
Make & model: ISUZU "A-6BG1T" diesel engine
Type: 4-cycle, water-cooled, direct injection, with turbocharged
Rated power: Gross 122kW (164 hp)/2,200rpm
Net 118kW (158 hp)/2,200rpm
Maximum torque: Gross 559N•m (58kgf•m)/1,800rpm
Net 559N•m (57kgf•m)/1,800rpm
Number of cylinders: 6
Bore x stroke: 105mm x 125mm
Total displacement: 4.96lit
Cooling type: Direct drive pusher type fan
Pressurized radiator
Fuel injection pump: Bosch type
Governor: All-speed mechanical type
Air cleaner: Dry type (Double element)
Generator: DC 24V 88 Ah × 2
Starter motor: DC 24V 4.5kW (6.0 hp)
Generator: AC 24V 0.96 kW (40 ampere)

Brake system
Service brake: 4-wheel hydraulic wet-disc brakes actuated by air
Parking brake: Spring applied air pressure released
Type located on front driveline
Emergency brake: Same as parking, applied on failure in brake air line

Steering system
Type: Articulated frame, hydraulic power steering by Orbitrol
Full articulation angle: 40° to each side

Loading system
Type: Front end loading, Z bar linkage system
Bucket dumping angle at fully raised: 45°
Hydraulic cycle time
Lifting (at full load): 6.2sec
Lowering (empty): 3.1sec
Dumping: 1.2sec
Total cycle time: 9.5sec

Hydraulic system
Oil pump: Gear type, 151lit/min
Steering oil pump: Gear type, 60lit/min,
Main oil pump: 6.9Mpa (70kgf/cm²) @2,200rpm
Pilot oil pump: Gear type, 4lit/min,
Type: 3.5Mpa (36kgf/cm²) @2,200rpm
Control valve: Multiple control valve
Steering: Orbitrol
Lift cylinder: Double acting piston
Type: 2×140mm+574mm
Tilt cylinder: Double acting piston
Type: 1×160mm+502mm
Steering cylinder: Double acting piston
Type: 2×80mm+380mm
Relief set pressure: Control valve
Prior value: 20.6Mpa (210kgf/cm²)

Service refill
Fuel tank: 220lit
Engine lubricant (including oil pan): 22lit
Engine cooling water: 35lit
TM&T/C: 30lit
Axle front/rear: 99lit
Brake equipment: 4.9lit
Hydraulic system (including oil tank): 135lit

Axles & Final drives
Type: 4-wheel drive
Axle make & type: Kawasaki
Full floating type
Differential gear: Spiral bevel gear, torque proporcioning, gear ratio 3.90
Final reduction gear: Outboard mounted, planetary gear, gear ratio 5.333
Rear axle oscillation angle: ±12°
Tire (standard): 20.5 (L2) Tubeless
Wheel rim: 17.00×25

Weight change
Option item: Operating weight(kg) Tip ping load(kg) Overall width(mm) (outside tire) Tread Vertical dimensions (mm) Overall length(mm)
Canopy(instead of ROPS cab): -450 -425 -365 — — -65 —
Soft cab(instead of ROPS cab): -170 -205 -175 — — -10 —
ROPS canopy(instead of ROPS cab): -200 -150 -140 — — -10 —
Remove ROPS cab: -520 -490 -420 — — -275 —
Tires
20.5-25-12PR(L2): ±120 ±90 ±80 ±0 ±0 ±0 —
20.5-25-12PR(L3): ±120 ±90 ±80 ±0 ±0 ±0 —
20.5-25-16PR(L3): ±160 ±120 ±105 ±0 ±0 ±0 —
23.5-25-12PR(L2): ±730 ±560 ±460 ±50 ±40 ±60 -60
Air conditioner: ±100 ±120 +100 — — — —
Counter weight: ±330 ±740 ±630 — — — — +65
Belly guard: ±55 ±50 ±40 — — — —
## Bucket

### Bucket selection charts

<table>
<thead>
<tr>
<th>Material density</th>
<th>Basalt, granite, piled</th>
<th>Clay and gravel, dry</th>
<th>Earth, mud, wet</th>
<th>Granite, broken</th>
<th>Gravel</th>
<th>Gypsum</th>
<th>Limestone, coarse, sized</th>
<th>Sand, dry</th>
<th>Sandstone, quarried</th>
<th>Stone or gravel, 3/4&quot; size</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg/m³</td>
<td>1537</td>
<td>1601</td>
<td>1729</td>
<td>1537</td>
<td>1761</td>
<td>2268</td>
<td>1569</td>
<td>1681</td>
<td>1313</td>
<td>1569</td>
</tr>
</tbody>
</table>

### Remarks

- Materials and specifications are subject to change without notice and without any obligation on the part of the manufacturer.
- This information, while believed to be completely reliable, is not to be taken as warranty for which we assume legal responsibility.
- Dumping clearance and reach are measured from bucket edge in accordance with SAE J732C.
- Color for model shown in this brochure is a standard Kawasaki yellow.
- Counterweight(option) should not be used with tire ballast.
- This specification sheet may contain attachments and optional equipment which are not available in your area. Please contact your local Kawasaki dealer for those items which your require.
STANDARD EQUIPMENT

*Standard specifications may vary. Please consult your Kawasaki dealer for more information.

**Electrical**
- 40 ampere alternator
- Back up lights
- Brake & tail lights
- Electric starter
- Headlights with high and low beams (4 front)
- Transmission declutch switch
- Turn signal switch
- Working lights (2 rear)

**Gauges and indicators**
- Air cleaner warning lamp
- Air pressure gauge and warning lamp
- Auto shift indicator lamp
- Battery charge lamp
- Brake oil circuit warning lamp
- Central warning lamp
- Engine coolant temperature gauge and warning lamp
- Engine oil pressure warning lamp
- Fuel level gauge
- High beam indicator lamp
- Hour meter
- Neutral indicator lamp
- Parking brake indicator lamp
- Preheat indicator lamp
- Rear working light indicator lamp
- Speedometer
- Torque converter oil temperature gauge and warning lamp
- Transmission control warning lamp
- Transmission declutch lamp
- Transmission status monitor
- Turn signal indicator lamp (right/left)

**Operator environment**
- Ashtray
- Adjustable operator seat with suspension
- Boom/bucket control dual levers
- Cigarette lighter (24V)
- Down shift button
- Electric dual horn
- Tilt steering wheel
- Wrist rest

**Power train**
- Air cleaner double elements dry type
- Air over hydraulic enclosed wet multi-disc brakes
- Kawasaki auto shift transmission
- Kawasaki axles, torque proportioning differentials (front/rear)
- Kawasaki torque converter
- ISUZU A-6BG1T diesel engine
- Tires, 20.5(L2) tubeless

**Others**
- Bucket leveler
- Drawbar hitch with pin
- Handrails
- Kickout device
- Ladders, left and right
- Loading linkage, sealed Z-bar type
- Secondary brake

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**OPTIONAL ITEMS**

**Air conditioner**
- Air suspension seat
- Additional counterweight
- Back up alarm
- Emergency steering
- Engine and Transmission belly guard
- High lift arm
- Hydraulic three spool valve system
- LED rear lamps
- Limited slip differential (LSD) for both axles
- Log handling package
- Open canopy
- Open ROPS/FOPS canopy
- Pre cleaner
- Quick coupler and hydraulic circuit for quick coupler pins
- Rear wiper and washer
- Ride control (speed sensitive automatic)
- ROPS/FOPS cab (left and right doors, walk-through design)
- Seat belt
- Several bucket and tire options are available
- Soft cab (left and right doors, walk-through design)
- Vandalism protection kit
- Working lights (2 front)

**Cab specifications**
- Coat hook
- Cup holder
- Floor mat
- Front wiper and washer
- Lockable doors with sliding windows by regulator handles (left and right)
- Rearview mirrors (interior and exterior)
- Storage compartment
- Sun visor
- Tinted safety glass

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