



TATA HITACHI

Reliable solutions

NEW

SHINRAI

• RELIABLE • TRUSTWORTHY • CAPABLE

POWER



CEV 5



Engine Gross Power
74.3 HP



Operating Weight
8200 – 8500 kg



Bucket Capacity
Backhoe: 0.30 m³
Loader: 6-in-1 bucket (1.0 m³)

New CEV 5 Engine¹

Japanese fuel efficient, compact and powerful engine with low noise and vibration

Spacious ROPS & FOPS-II Cabin³

Ensures operator safety during machine roll over and against falling objects

Parallelogram Bar Mechanism²

Provides high lifting force and uniform movement of the loader bucket

21" Fan²

Enhances the engine performance in high temperature and dusty conditions

2.62 m Loader Arm²

Enables easy material loading into the center of high sided trucks

Front Counterweight*²

Provides additional stability on rough terrains and inclines

Standard 6-in-1 Bucket²

Sturdy buckets for wide range of applications

Efficient Braking System³

Provides safe and effective stopping with minimal effort

1.96 m Backhoe Arm**2.76 m Backhoe Boom²**

Extended reach and digging depth with enhanced durability

Wind Screen Guard *³

Protects against glass breakage from falling materials dropped by loader bucket

Air Conditioning*⁴

Helps in comfortable operation and enhances operator efficiency during long working hours

0.30 m³ Backhoe Bucket²

Bigger buckets for easy digging and higher production

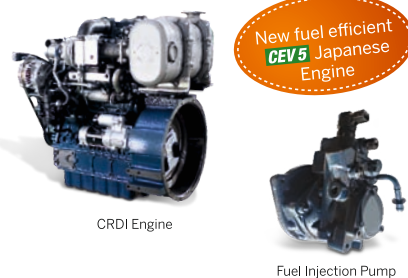
Aesthetic Sheet Metal Fender and Skirt¹

Gives a premium look with high durability and provides better protection for internal components

Carraro, Synchro Shuttle Transmission and Heavy-Duty Axle¹

World renowned and market proven aggregates that enhance Reliability and Durability

¹ RELIABILITY ² PRODUCTIVITY ³ SAFETY ⁴ COMFORT

RELIABLE ENGINE

- Superior engine performance
- Engine Control Unit (ECU) equipped with CRDI(Common Rail Direct Injection) system
- 4 valves per cylinder
- Engine mounted after treatment device (DOC – Diesel Oxidation Catalyst + DPF – Diesel Particulate Filter)
- Automatic fuel priming system
- Rotary fuel injection pump
- Quieter engine

HEAVY DUTY DRIVE LINE

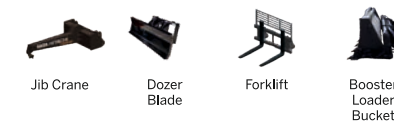
- Carraro Axle and Transmission for optimized performance and increased life
- Proven transmission and axle system
- 4 wheel drive
- Strong and tested structures for tough operations

EFFICIENT HYDRAULIC SYSTEM

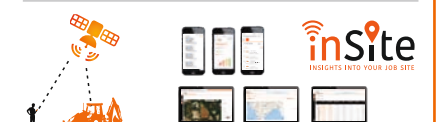
- Provides great performance with fuel efficiency
- High/ Low pressure unloader systems ensure optimum use of hydraulic oil when needed
- Ensures optimal utilisation of engine and hydraulic power
- Long lasting hydraulic hoses for superior life

SAFE AND COMFORTABLE OPERATOR CABIN

- Well ventilated and spacious cabin
- Excellent visibility
- Comfortable operator seat
- Large leg space for comfortable operation
- Ergonomic controls
- User- friendly consoles
- Ample storage space
- Powerful music system with FM, USB AUX, Bluetooth connectivity and hands-free phone connectivity

WIDE RANGE OF ATTACHMENTS**LOADER ATTACHMENTS****BACKHOE ATTACHMENTS****ASSURED SERVICE SUPPORT**

- Warranty, extended warranty and post-warranty services.
- On-site services through a wide network of dealerships
- Fault codes display in the cluster for ease of maintenance and troubleshooting
- Field diagnostic vehicle for immediate on-site resolution
- On-site and plant-based training programmes



SPECIFICATIONS

ENGINE

Make	Kubota
Model	V3800-CR-TE5
Type	Turbo-charged, direct injection
Gross Power	74.3 HP (55.4kW) @2200 RPM
Max. Torque	310 Nm @ 1,500 RPM
Battery	12 V, 150 Ah
No. of Cylinders	4 nos
Bore	100 mm
Stroke	120 mm
Displacement	3.7 L
Alternator	100Amps

HYDRAULIC SYSTEM

Efficient Hydraulic System (EHS) with Tandem gear pump for lower fuel consumption
System Pressure 245 bar
Max. Pump Flow 113 lpm @ 1,950 RPM
Control Valve: Sectional valves that are individually replaceable.

TRANSMISSION

- Equipped with Carraro-make synchro-shuttle transmission.
- Solenoid-type mechanism allows smooth, easy forward and reverse movements.
- Transmission allows for four forward and two reverse speeds.

AXLE

Front Axle

- Heavy-duty, non-powered axle
- Floats up to +/-8 degrees to handle uneven terrains
- 4 WD Front Axle, King Pin Angle=7°, Camber Angle=1.5, Ratio Total-13.714:1

Rear Axle

- Rear heavy-duty Carraro axle
- High brake torque

SPEEDS

Speeds @ 1950 rpm with standard tyres

Forward

1st	5 kmph
2nd	8 kmph
3rd	17 kmph
4th	32 kmph

Reverse

1st	6 kmph
2nd	9 kmph
3rd	Not recommended
4th	Not recommended

BRAKES

Service Brake: Stepped Bore type, Oil immersed wet disc, hydraulically actuated with independent pedals that enable precise control, allowing shorter turning radii and easier manoeuvring in slushy terrains.

Parking Brake: Hand operated with Disc on Rear Axle

REFILL CAPACITY

Fuel Tank	128 L
Engine Oil	13.2 L
Engine Coolant	14.4 L
Transmission Oil	16 L
Rear Axle Oil	17.1 L
Hydraulic Oil Refill	86 L
Front Axle-Live	9.1 L [4WD]

BACKHOE PERFORMANCE (Forces as per ISO 6015 : 2006)

Backhoe Bucket digging force	5,534 Kg	Backhoe Arm Length	1.96 m
Backhoe Arm digging force	3,136 Kg	Backhoe Boom Length	2.76 m
Slider Frame Travel	1,050 mm	Bucket Capacity	0.30 m ³

LOADER PERFORMANCE (Forces as per ISO 6015 : 2006)

Below ground dig depth	55 mm
Loader bucket break-out force	6,499 Kg
Loader arm break-out force	5,135 Kg
Payload	1,920 kg
Bottom dump bucket capacity (STD)	6-in-1 bucket (1.0 m ³)
Tilt dump bucket capacity	1.1 m ³

BACKHOE BUCKET OPTIONS (Bucket capacity as per ISO 7451 : 2007 Heaped)

Type	Bucket size	Bucket width	No. of tooth point
Standard bucket	0.30 m ³	784 mm	5
Heavy duty bucket	0.22 m ³	695 mm	5
Trench bucket	0.18 m ³	600 mm	5
Trench bucket	0.12 m ³	1.5 ft	3
Trench bucket	0.09 m ³	1 ft	3
Ditch cleaning bucket	0.35 m ³	945 mm	NA

LOADER BUCKET OPTIONS (Bucket capacity as per ISO 7546 : 1983 Heaped)

Type	Bucket size	Bucket width	No. of tooth point
Loader bucket	1.1 m ³	2352 mm	8
6 in 1 Loader bucket	1.0 m ³	2357 mm	8

STEERING

Type Hydraulic actuation with priority for smooth and better control

Turning Circle

Outside Loader Bucket	11.73 m
Outside Wheels	8.6 m

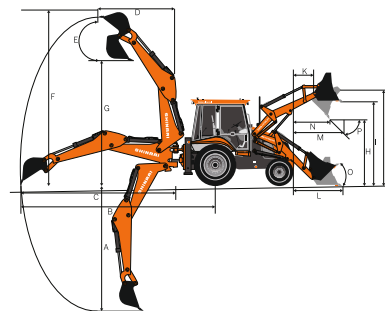
TYRES

Front	9x16, 16 PR
Front Wider (4 WD) (STD)	12.5/80-18, 12 & 14 PR
Rear (STD)	16.9 x 28, 12 PR
Rear (HD)	14 x 25, 20 PR

DIMENSIONS

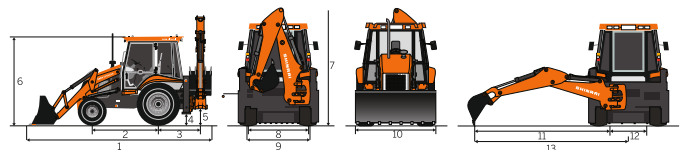
Dim. Notations	Dimension	Description
A	5,003	Max. digging depth
B	7,196	Max. reach from rear axle centre
C	5,798	Max. reach from slew centre
D	2,520	Max. reach during loading from slew centre
E	180°	Bucket rotation angle
F	6,360	Max. cutting height in backhoe (Stabilizer fully extended position)
G	4,476	Max. loading height in backhoe (Stabilizer fully extended position)
H	2,842	Dump height
I	3,509	Load over height
J	3,729	Pin height
K	454	Pin forward reach
L	1,817	Reach at ground level
M	1,432	Max. reach at full height
N	982	Reach in bucket dump position
Bucket Angles		
O	45°	Bucket roll-in angle
P	45°	Bucket rotation angle

All dimensions are in mm



Dim. Notations	Dimension	Description
1	6,325	Transport length
2	2,130	Wheel base
3	1,370	Slew centre to rear axle centre
4	320	Minimum ground clearance point
5	485	Slew ground clearance
6	2,970	Height of cabin
7	3,820	Machine transportation height
8	1,710	Rear wheel tread width
9	1,900	Front wheel tread width
10	2,357	Loader bucket width
11	5,798	Max. side reach to slew centre
12	1,050	Total side-shift travel
13	6,323	Max. side reach to machine centre

All dimensions are in mm | All dimensions, weights and timings are variable within 1.5%

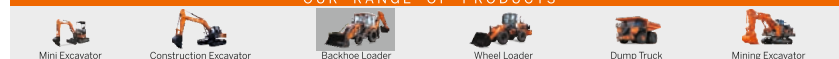


Tata Hitachi Construction Machinery Company Private Limited

Registered Office: Jubilee Building, 45 Museum Road, Bangalore, India 560025

Telephone: +918066953301 / 02/03/04/05 | Email: info@tatahitachi.co.in

OUR RANGE OF PRODUCTS



Authorised Dealer

These specifications are subject to change without prior notice. The machine depicted may vary from the actual machine. Please contact our nearest office for latest specifications. Accessories shown here are not part of the standard equipment. Performance of the machine may vary with site and operating conditions encountered.