

TATA HITACHI

Reliable solutions

SHINRAI **POWER**

• RELIABLE • TRUSTWORTHY • CAPABLE

YOUR STRONGEST PARTNER 4x4



Model
SHINRAI POWER

Operating Weight
8770 kg

Engine
99 HP

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





**RELIABLE DRIVE LINE FOR
RELIABLE PERFORMANCE**

- The most powerful engine (99 HP)
- Superior engine performance
- Globally proven and reliable transmission & axles
- In-line fuel injection pump (FIP) for cost-effective maintenance



IN-LINE FUEL INJECTION PUMP



AXLE & TRANSMISSION

**RELIABLE STRUCTURES FOR
LONG LIFE AND PERFORMANCE IN
TOUGH CONDITIONS**

- Strong and tested structures for tough operations
- Higher reaches of loader and backhoe attachments for faster and effortless performance
- Manufactured with high grade steel through robotic welding

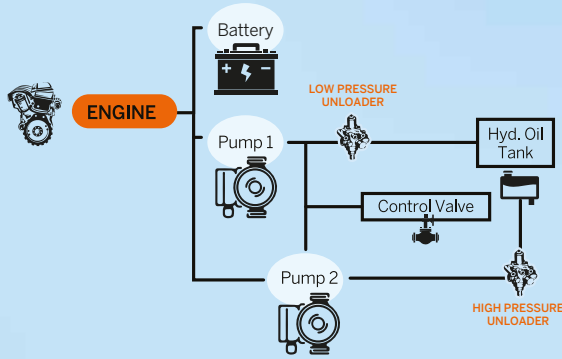


ROBUST STRUCTURES

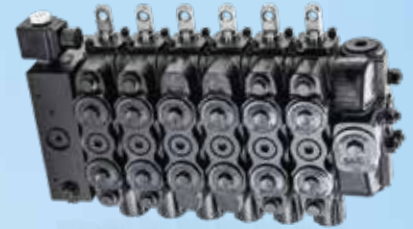


EXCELLENT HYDRAULIC SYSTEM FOR MORE POWER WITH HIGH FUEL EFFICIENCY

- Provides great performance with fuel efficiency
- High/Low pressure unloader systems ensure optimum hydraulic oil, when needed
- Ensures optimal utilisation of engine and hydraulic power



HYDRAULIC PUMP



CONTROL VALVE

A CABIN THAT OFFERS MAXIMUM COMFORT AND SAFETY



- Well ventilated and spacious cabin
- Excellent visibility
- Comfortable operator seat
- Large leg space for comfortable operation
- Air-conditioner*
- Ergonomic controls
- User-friendly consoles
- Multi-functional display
- Ample storage space
- Music system with FM and USB
- Meets FOPS safety requirements
- Quieter engine

*Optional





SUPPORT CHAIN

ULTIMATE SUPPORT FOR THE ULTIMATE MACHINE

- Warranty, extended warranty and post-warranty services
- After-sales support through trained engineers
- Easy availability of genuine parts



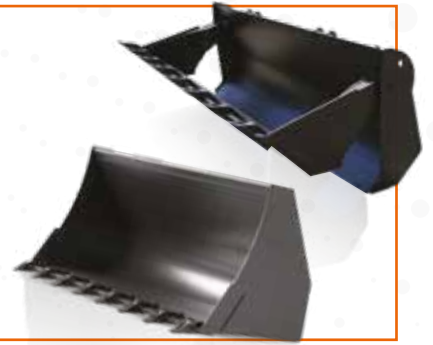
GROUND-LEVEL INSPECTION



LOADER BUCKET OPTIONS

6-in-1 Loader Bucket: Multi-purpose loader bucket is used for applications like loading, dozing, leveling, grabbing, spreading and backfilling. This bucket is useful in performing variety of applications.

Loader Tilt Bucket: Loader bucket is used for standard operations like loading and dozing applications.



REAR TYRES

General Purpose Tyres: Recommended for soft soil strata applications. Provides better grip and helps maneuvering machine in slushy soil strata.

Heavy Duty Tyres: Recommended for hard soil strata applications. Has additional ply rating to withstand hard soil conditions like crusher site.



BACKHOE BUCKET OPTIONS



Standard Backhoe bucket 0.30 m³: Recommended for soil applications and optimally designed for loading with high bucket fill ratio ensuring more load in each bucket pass.

Heavy Duty bucket 0.22 m³: Used in applications like crushing where material handled is predominantly stone chips or the likes.

Trench Buckets, 1 ft and 1.5 ft width: Used exclusively for pipe-laying and trench applications. Currently offering two varieties of buckets based on the width of the trench. The 1 feet bucket is used for optical fiber cable laying operations and the 1.5 feet bucket is preferred for water pipe and electrical line applications.



Ditch Cleaning Bucket: This bucket comes with perforated holes in the bucket which helps in draining water from the load taken in the bucket. It is of great use in solid waste handling.

ATTACHMENTS



Rock Breaker:
For demolition and breaking of small to medium sized stone.



Auger:
For drilling, pole erection, plantation, fencing and similar applications.



Quick Coupler:
Coupler allows fast changeover between bucket and other attachments.



Ripper Tooth:
For removing rocks, tree stumps, ripping hard ground. Most useful in ground clearance applications.



Hedge Trimmer:
To cut back protruding branches on road and railway lines and general tree and bush trimming application



Mulcher:

- For clearing dense bushes, grinding small trees and cutting thick grass
- For Road side, canal and river bank clearance applications

TECHNICAL SPECIFICATIONS

ENGINE

Make	Cummins
Model	B3.999C32
Type	Turbo-charged, inter-cooled direct injection
Gross Power	99 HP (73.4 kW) @ 2,200 RPM
Max. Torque	410 Nm @ 1,350 RPM
Battery	12 V, 150 Ah
No. of Cylinders	4 nos.
Bore	102 mm
Stroke	120 mm
Displacement	3,922 cc
Alternator	95 Amps

HYDRAULIC SYSTEM

Excellent Hydraulic System (EHS) with Tandem gear pump for lower fuel consumption
 System Pressure 245 bar
 Max. Pump Flow..... 128 lpm @ 2,200 RPM
Control Valve: Sectional valves that are individually replaceable.

TRANSMISSION

- Equipped with Carraro-make transmission with synchro-shuttle
- 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 +/-16 degrees to handle uneven terrains

Rear Axle

- Rear Carraro axle that is heavy-duty and long-lasting
- High brake torque

SPEEDS

Forward

1st.....	4 kmph
2nd.....	7 kmph
3rd.....	17 kmph
4th.....	29 kmph

Reverse

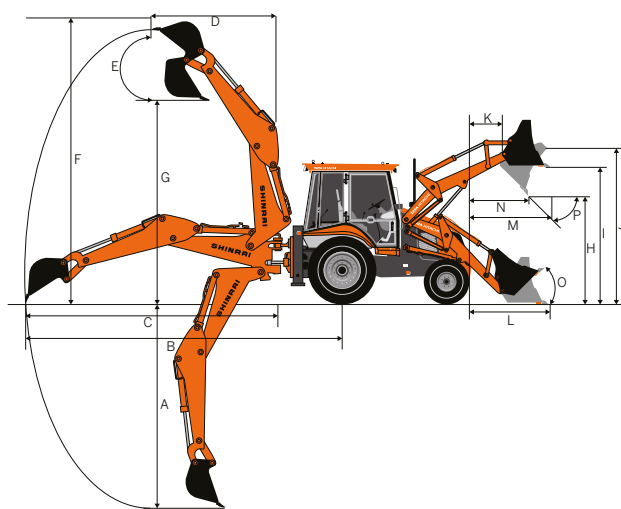
1st.....	6 kmph
2nd.....	9 kmph
3rd.....	Not recommended
4th.....	Not recommended

BACKHOE PERFORMANCE

Backhoe Bucket digging force.....	5,401 kgf	Backhoe Arm Length.....	1.96 m
Backhoe Arm digging force.....	3,136 kgf	Backhoe Boom Length.....	2.46 m
Slider Frame Travel.....	1,050 mm	Bucket width	752 mm

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	6,526	Max. cutting height in backhoe (Stabilizer fully extended position)
G	4,476	Max. loading height in backhoe (Stabilizer fully extended position)

All dimensions are in mm



BRAKES

Service Brake: Oil-immersed wet disc, that is hydraulic-actuated, with independent pedals for better control in narrow spaces
 Parking Brake: Hand-operated disc brake on the rear axle

STEERING

Type: Hydraulic actuation with priority for smooth control
 Turning Radius..... Inner wheels not braked
 Outside Loader Bucket..... 11.73 m
 Outside Wheels..... 8.9 m

TYRES

Front (Std.).....	12.5 x 16, 14 PR
Rear (Std.).....	16.9 x 28, 12 PR
Rear (HD).....	14x25, 20 PR

REFILL CAPACITY

Fuel Tank.....	128 L
Engine Oil.....	10.0 L
Engine Coolant.....	15 L
Transmission Oil.....	19 L
Rear Axle Oil.....	18.6 L
Hydraulic Oil Refill.....	86 L
Front Axle-Live.....	9.6 L (4WD)

LOADER PERFORMANCE

Below ground dig depth.....	110 mm
Loader bucket break-out force.....	6,499 kgf
Loader arm break-out force.....	5,135 kgf
Payload.....	1,920 kg
Loader Bucket (6-IN-1) capacity.....	1.0 m ³

Dim. Notations	Dimension	Description
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

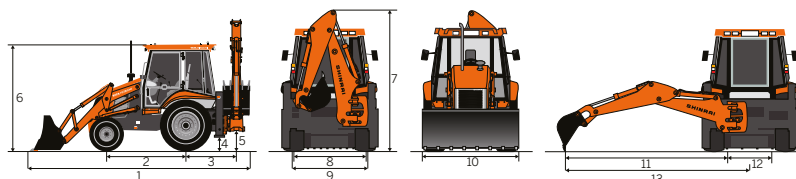
Notation	Angle	Description
O	45°	Bucket roll-in angle
P	45°	Bucket rotation angle

All dimensions are in mm

MAIN MACHINE STATIC DIMENSIONS

Symbol	Measured value	Description
*	8,770	Machinery weight (minimum unit 5 kg)
1	6,414	Transport length
2	2,110	Wheel base
3	1,415	Slew centre to rear axle centre
4	295	Minimum ground clearance point
5	485	Slew ground clearance
6	2,885	Height of cabin
7	3,820	Machine transportation height
8	1,710	Front wheel tread width
9	1,900	Rear 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
14	715	Static tire radius

All dimensions are in mm



Tata Hitachi Construction Machinery Company Private Limited

Registered Office: Jubilee Building, 45 Museum Road Bangalore, India 560025
 Telephone: +91 80 66953301 / 02/ 03/ 04/ 05 | Email: info@tatahitachi.co.in

www.tatahitachi.co.in
Toll Free Number: 1800 121 6633
EXTENDED WARRANTY
SUPPORT CHAIN
CERTIFIED USED EQUIPMENT
TATA HITACHI PREMIUM USED
VALUE



Authorised Dealership

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.