



TATA HITACHI

Reliable solutions

SHINRAI

● RELIABLE ● TRUSTWORTHY ● CAPABLE



Model
SHINRAI-BX80

Operating Weight
7,800 kg

Bucket Capacity
Backhoe: 0.26 m³
Loader: 1.1 m³

**THE NEW
REVOLUTION IN
BACKHOE LOADERS**

RELIABLE DRIVE LINE FOR RELIABLE PERFORMANCE

- Superior engine performance
- Reliable transmission and axle system
- In-line fuel injection pump for easy maintenance



Engine



Fuel Injection Pump



Axle & Transmission



SHINRAI

• RELIABLE • TRUSTWORTHY • CAPABLE



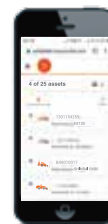
BE IN SYNC WITH SHINRAI

- GPS- and GPRS-based remote tracking through InSite
- Monitors machine location and operations
- Offers information about the machine and the fleet

inSite
INSIGHTS INTO YOUR JOB SITE



BE IN SYNC WITH YOUR MACHINE



Location, Geo Fencing



Fuel Levels



Asset Utilization

INSITE HELPS YOU WITH



Fleet Management



Ability to track Machine Maintenance/Service due date



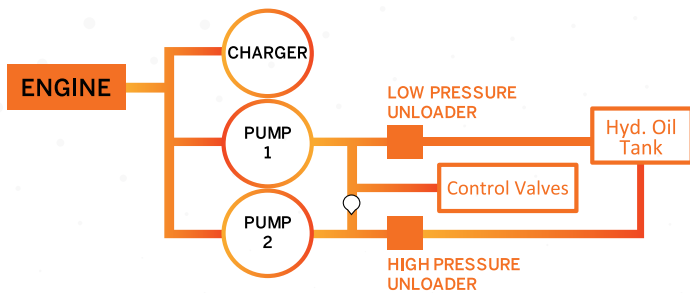
Overall Fleet Summary in Graphical Widgets (Dashboard)



Asset Operation

EXCELLENT HYDRAULIC SYSTEM

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



Reliable Pump and Control Valve

A CABIN THAT OFFERS MAXIMUM COMFORT AND SAFETY

- Maximum comfort, safety and noise reduction
- Meets ROPS*/FOPS* safety requirements
- Offers air-conditioning*, ergonomic controls
- User-friendly consoles and ample storage space



Spacious Cabin



ULTIMATE SUPPORT FOR THE ULTIMATE MACHINE



SUPPORT CHAIN

- Warranty and post-warranty services
- On-site services through a wide network of dealerships
- Field diagnostic vehicle for immediate on-site resolution
- On-site and plant-based training programmes



Field Diagnostic Vehicle



Ground-level Inspection

LOADER BUCKET OPTIONS

Standard Loader Bucket 1.1 m³: Loader bucket is used for standard operations like loading and dozing applications.

6-in-1 Loader Bucket: Multi-purpose loader bucket is used for applications like loading, dozing, leveling, grabbing, spreading and backfilling. This is useful in construction sites for performing various 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 0.26 m³: It is 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: It is 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.

Ripper Tooth: Used for pulling a block of rock or concrete.

ATTACHMENTS



Rock Breaker:

Due to exponential growth in construction sector of both Urban & Rural India, this attachment is used extensively for demolition applications and breaking small to medium sized stones. The Tata Hitachi B60 Super Breaker coupled with SHINRAI BX80 Backhoe Loader offers superior performance & increased efficiency.

Auger: Used for drilling/pole erection/plantation/fencing/casing applications. The Tata Hitachi 8000MAX offers high power torque which can dig up to 6 M deep and 1200 MM diameter hole.



Quick Coupler: The Tata Hitachi Quick Coupler allows fast changeover of bucket & multiple attachments, thereby achieving increased productivity due to reduced changeover time and labor.

TECHNICAL SPECIFICATIONS

ENGINE

Make Cummins
 Model B3.980C30
 Type Turbo-charged, inter-cooled direct injection
 Gross Power 80 HP (60 kW) @ 2,200 RPM
 Max. Torque 325 Nm @ 1,300 RPM
 Battery 12 V, 130 Ah, 95 amps
 No. of Cylinders 4 nos.
 Bore 102 mm
 Stroke 120 mm
 Displacement 3,922 cc

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 5.78 kmph
 2nd 9.23 kmph
 3rd 20.60 kmph
 4th 40.44 kmph

Reverse

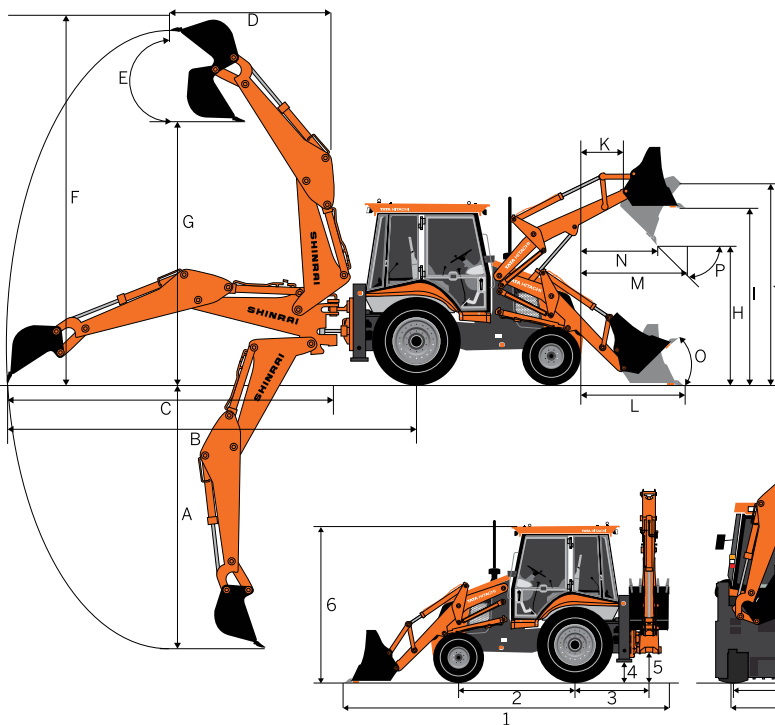
1st 7 kmph
 2nd 11.22 kmph
 3rd Not recommended
 4th Not recommended

BACKHOE PERFORMANCE

Backhoe Bucket digging force 5,685 kgf Backhoe Arm Length 1.96 m
 Backhoe Arm digging force 3,220 kgf Backhoe Boom Length 2.46 m
 Slider Frame Travel 1,050 mm Bucket width 752 mm
 Lift Capacity of bucket pivot at full reach (no bucket fitted) 1,629 kg

Dim. Notations	Dimension	Description
A	4,702	Max. digging depth
B	6,850	Max. reach from rear axle centre
C	5,480	Max. reach from slew centre
D	2,012	Max. reach during loading from slew centre
E	180°	Bucket rotation angle
F	6,100	Max. cutting height in backhoe
G	4,355	Max. loading height in backhoe

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.) 9x16, 16 PR
 Rear (Std.) 16.9 x 28, 12 PR
 Rear (HD) 14x25, 20 PR

REFILL CAPACITY

Fuel Tank 128 L
 Engine Oil 15 L
 Engine Coolant 15.7 L
 Transmission Oil 16 L
 Rear Axle Oil 17.1 L
 Hydraulic Oil Refill 86 L

LOADER PERFORMANCE

Below ground dig depth 110 mm
 Loader bucket break-out force 6,580 kgf
 Loader arm break-out force 5,488 kgf
 Payload 1,920 kg
 Loader Bucket capacity 1.1 m³

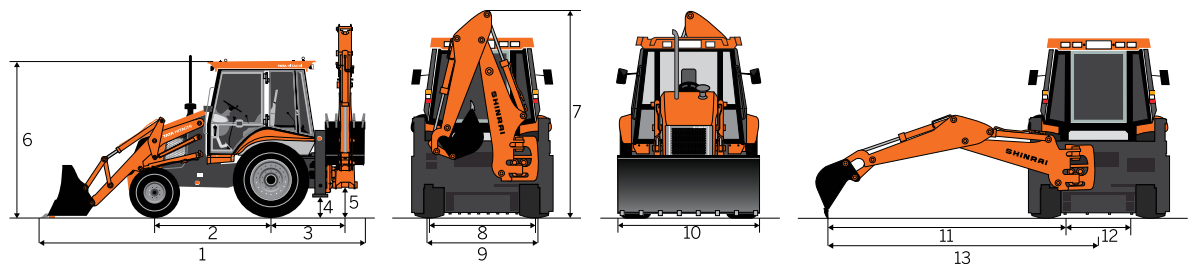
Dim. Notations	Dimension	Description
H	2,750	Dump height
I	3,276	Load over height
J	3,550	Pin height
K	367	Pin forward reach
L	1,620	Reach at ground level
M	1,341	Max. reach at full height
N	860	Reach in bucket dump position
Bucket Angles		
O	45°	Bucket roll-in angle
P	45°	Bucket rotation angle

All dimensions are in mm

OVERALL DIMENSIONS

Dim. Notations	Dimension	Description
1	6,030	Transport length
2	2,150	Wheel base
3	1,370	Slew centre to rear axle centre
4	350	Lowest ground clearance point
5	490	Ground clearance to slew centre
6	2,960	Height of cabin
7	3,605	Total transport height
8	1,900	Front wheel track width
9	1,710	Rear wheel track width
10	2,352	Loader bucket width
11	5,650	Max. side reach to slew centre
12	1,050	Total side-shift travel
13	6,175	Max. side reach to machine centre

All dimensions are in mm





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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.