



SPECIFICATIONS

ENGINE

Make Tata Hitachi
 Model V3800-TIE4B
 Type Turbo-charged, inter-cooled direct injection
 Gross Power 74.3 HP (55.4 kW) @ 2,200 RPM
 Max. Torque 305 Nm @ 1,500 RPM
 Battery (with cut-off switch) 12 V, 130 Ah
 No. of Cylinders 4 nos
 Bore 100 mm
 Stroke 120 mm
 Displacement 3,769 cc
 Alternator 100Amps

HYDRAULIC SYSTEM

Excellent 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 speed.

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

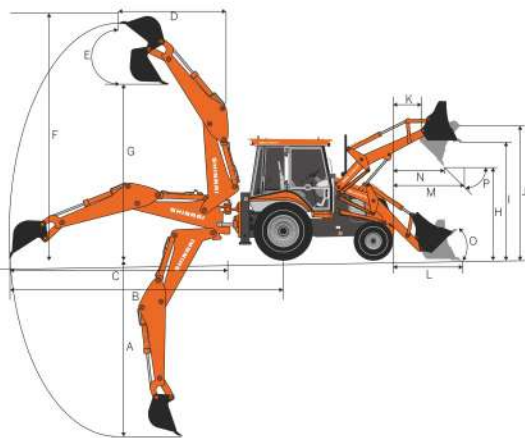
- Forward**
 - 1st 5 kmph
 - 2nd 8 kmph
 - 3rd 17 kmph
 - 4th 32 kmph
- Reverse**
 - 1st 6 kmph
 - 2nd 9 kmph
 - 3rd Not recommended
 - 4th Not recommended

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

Dim. Notations	Dimension	Description
A	4,775	Max. digging depth
B	6,880	Max. reach from rear axle centre
C	5,440	Max. reach from slew centre
D	2,001	Max. reach during loading from slew centre
E	180°	Bucket rotation angle
F	6,050	Max. cutting height in backhoe (Stabilizer fully extended position)
G	4,200	Max. loading height in backhoe (Stabilizer fully extended position)
H	2,745	Max. Dump height
I	3,305	Load over height
J	3,550	Pin height
K	360	Pin forward reach

All dimensions are in mm



BRAKES

Service Brake: Oil-immersed wet disc, 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 wheel braking
 Outside Loader Bucket 11.73 m
 Rear (HD) 8.6 m

TYRES

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

REFILL CAPACITY

Fuel Tank 128 L
 Engine Oil 13.2 L
 Engine Coolant 13 L
 Transmission Oil 16 L
 Rear Axle Oil 17.1 L
 Hydraulic Oil Refill 86 L
 Front Axle-Live 8.9 L [4WD]

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
L	1,620	Reach at ground level
M	1,332	Max. reach at full height
N	840	Reach in bucket dump position

Bucket Angles		
O	45°	Bucket roll-in angle
P	45°	Bucket rotation angle

All dimensions are in mm

BACKHOE BUCKET OPTIONS

Type	Bucket size	Bucket width	Bucket weight	No. of tooth point
Standard bucket	0.26 m³	752mm	220 kg	5
Heavy duty bucket	0.22 m³	695mm	195 kg	5
Trench bucket	0.09 m³	1 ft	122 kg	3
Trench bucket	0.12 m³	1.5 ft	135 kg	3
Ditch cleaning bucket	0.35 m³	945mm	220 kg	NA

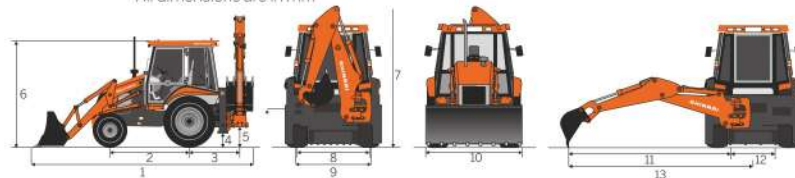
LOADER BUCKET OPTIONS

Type	Bucket size	Bucket width	Bucket weight	No. of tooth point
Loader bucket	1.1 m³	2352 mm	560 kg	8
6 in 1 Loader bucket	1.0 m³	2350mm	680 kg	8

OVERALL DIMENSIONS

Dim. Notations	Dimension	Description
1	6,040	Transport length
2	2,130	Wheel base
3	1,370	Slew centre to rear axle centre
4	320	Minimum ground clearance
5	485	Slew ground clearance
6	2,940	Height of cabin
7	3,530	Machine Transport Height
8	1,900	Front wheel tread width
9	1,700	Rear wheel tread width
10	2,354	Loader bucket width
11	5,520	Max. side reach to slew centre
12	1,035	Total side-shift travel
13	6,050	Max. side reach to machine centre

All dimensions are in mm



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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.

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Model
SHINRAI PRIME

Engine Gross power
74.3 HP

Operating Weight
STD: 8,050
4WD: 8,150
Loader: 7,800

Bucket Capacity
Backhoe: 0.26 m³
Loader: 1.1 m³

TM/CS/SHINRAI PRIME/BS/EC/02/2022