



TATA HITACHI

Reliable solutions

NEW!

SHINRAI **PRIME**

• RELIABLE • TRUSTWORTHY • CAPABLE

Aap Ka Sabse Bharosemand Saathi



Model
SHINRAI PRIME

Engine Gross power
74.3 HP

Operating Weight
STD: 8,050
4WD: 8,150

Bucket Capacity
Backhoe: 0.26 m³
Loader: 1.1 m³

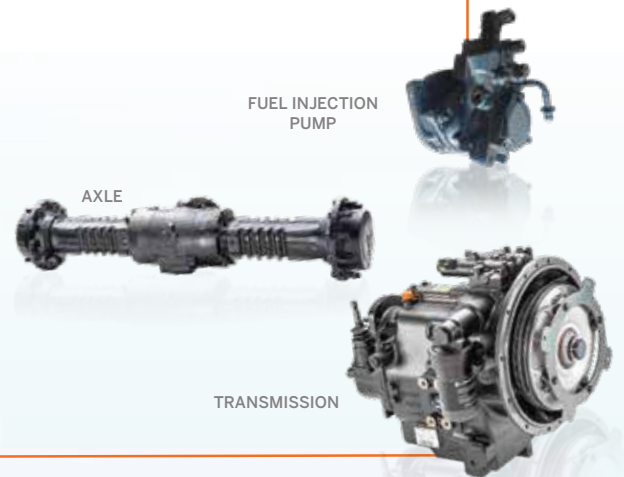


RELIABLE ENGINE FOR EXCEPTIONAL PERFORMANCE

- New fuel efficient CEV IV Japanese engine
- Superior engine performance
- Engine control unit (ECU) equipped with CRDI (Common Rail Direct Injection) system - Provides higher output power and torque rise while offering exceptional fuel efficiency
- 4 valve per cylinder
- Engine mounted After Treatment Device (DOC- Diesel Oxidation Catalyst)
- Automatic fuel priming system

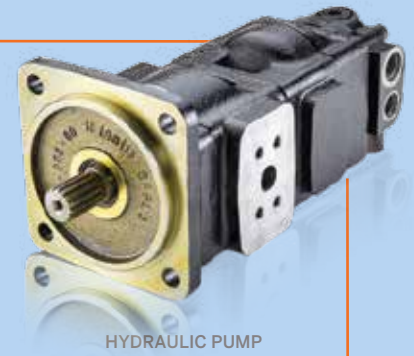
RELIABLE DRIVE LINE FOR TOP-NOTCH PERFORMANCE

- Electronically controlled parameters for optimized performance and increased life
- Proven transmission and axle system
- Rotary fuel injection pump
- 4 wheel drive*

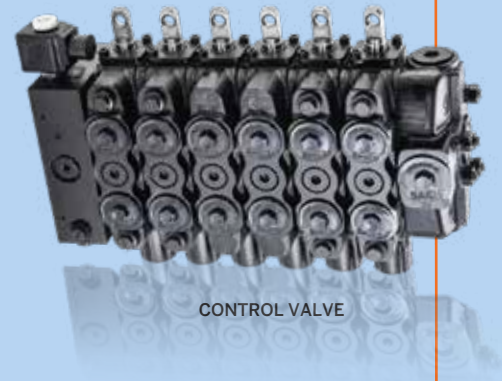
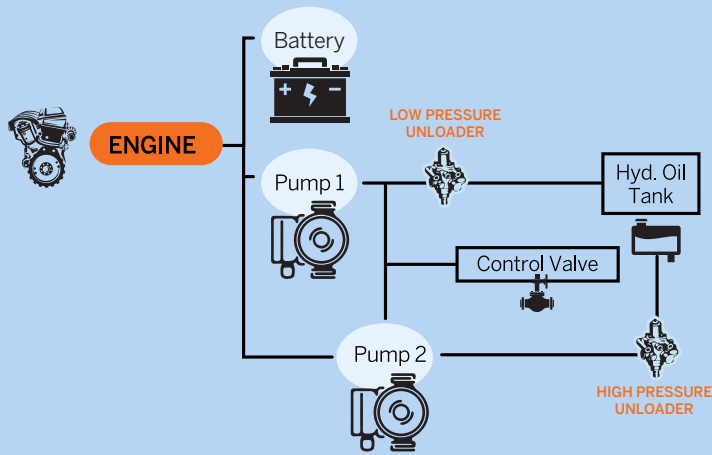


EXCELLENT HYDRAULIC SYSTEM FOR HIGH CALIBER PERFORMANCE

- 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
- Long lasting hydraulic hoses for superior life



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
- Ergonomic controls
- User-friendly consoles
- Multi-functional digital display
- Ample storage space
- Air-conditioner*
- Music system with FM and USB
- Meets FOPS* safety requirements
- Quieter engine



*Optional features

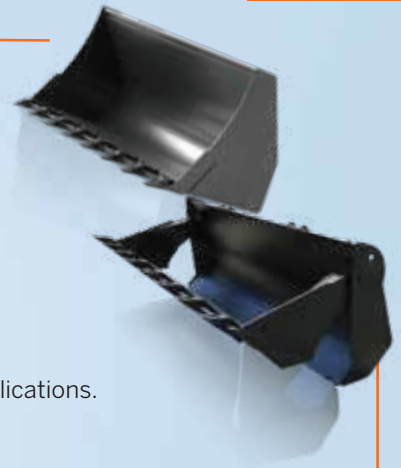
BUCKET OPTIONS

LOADER BUCKETS

- **Standard Loader Bucket** - Used for standard operations like loading and dozing.
- **6-in-1 Loader Bucket** - Multipurpose bucket used for loading, dozing, leveling, grabbing, spreading and backfilling.

BACKHOE BUCKETS

- **Standard Backhoe Bucket** - Recommended for soil applications.
- **Heavy Duty Bucket** - Used in crushing Application.
- **Trench Buckets** - Used for pipe-laying, optical fibre cable laying and trench applications.
- **Ditch Cleaning Bucket** - Comes with perforated holes which help in draining water so that solid waste load can be taken and used for solid waste management.



TYRE OPTIONS

General purpose tyres & heavy duty tyres

- **General purpose tyres** recommended for soft soil strata applications.
- **Heavy Duty Tyres** recommended for hard soil strata applications.



ATTACHMENT OPTIONS

- **Rockbreaker** - Extensively used for demolition applications



- **Quick Coupler** - allows fast changeover of bucket and multiple attachments.

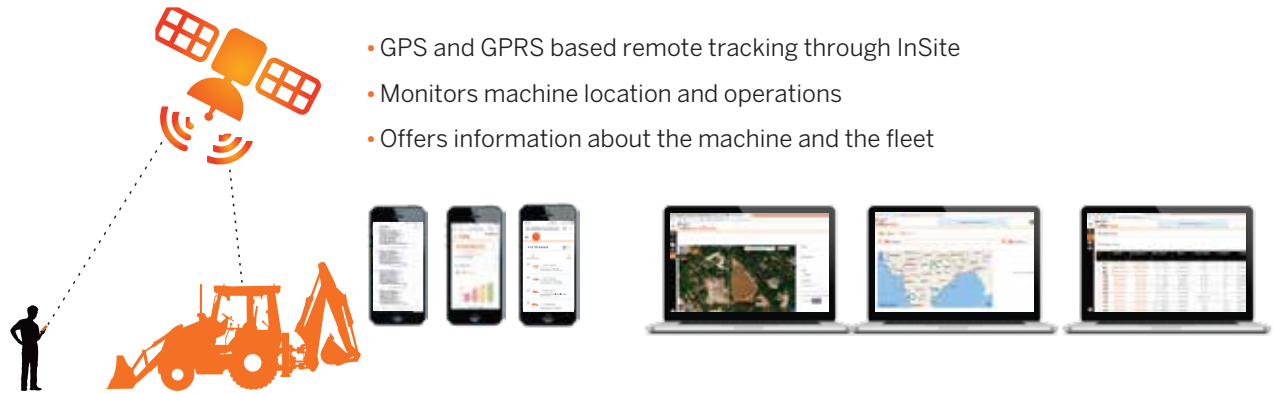


- **Auger** - Used for drilling, pole erection, plantation, fencing, casing applications.

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



TELEMATICS SUITE FOR REAL TIME MONITORING



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

Location, Geo Fencing

Fuel Level

Fleet Management

Overall Fleet Summary in Graphical Widgets (Dashboard)

Asset Utilisation

Asset Operation

Ability to track Machine Maintenance/Service due date

Accessible on Web and App

ULTIMATE SUPPORT FOR THE ULTIMATE MACHINE

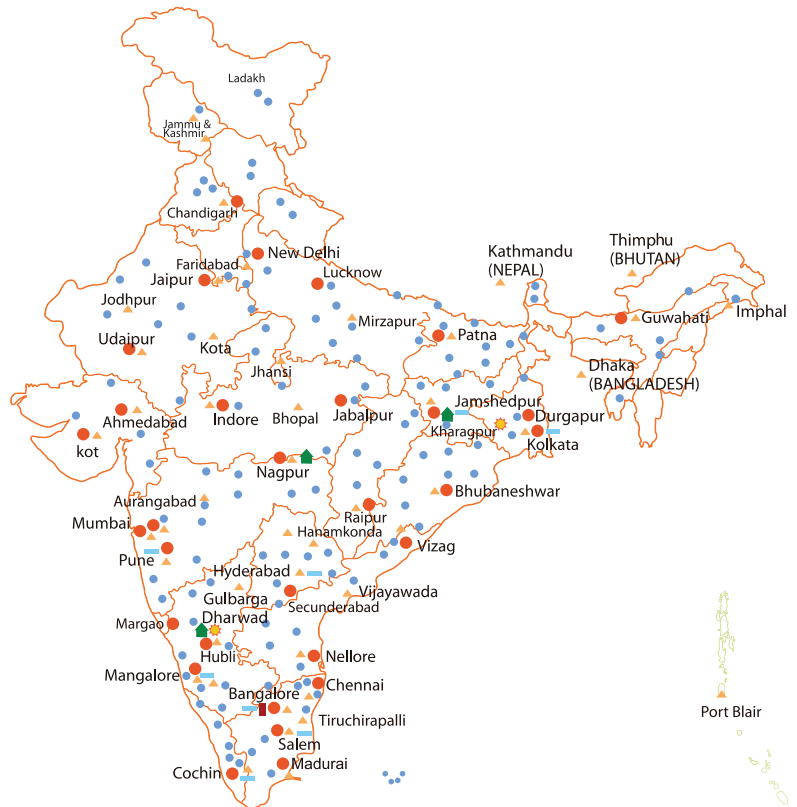
- Warranty, extended warranty and post-warranty services.
- On-site services through a wide network of dealerships
- Fault codes display in the cluster for ease of maintenance and troubleshooting
- Field diagnostic vehicle for immediate on-site resolution
- On-site and plant-based training programmes



SUPPORT CHAIN



FIELD DIAGNOSTIC VEHICLE



■ CORPORATE OFFICE
 ★ MANUFACTURING FACILITY
 ▲ WAREHOUSE
● TATA HITACHI OFFICE
 ▲ DEALER HO
 ● DEALER OUTLET
 ■ HYDRAULIC WORKSHOP



GROUND-LEVEL INSPECTION

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

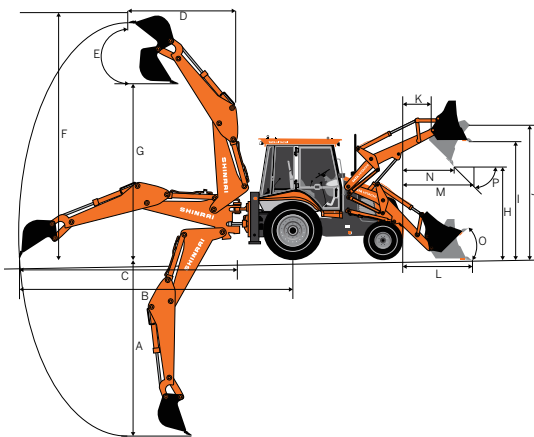
1st	6 kmph
2nd	9 kmph
3rd	Not recommended
4th	Not recommended

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	4,700	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	2,690	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
 Outside Wheels..... 8.6 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.....	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 m ³

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 m ³	752mm	220 kg	5
Heavy duty bucket	0.22 m ³	695mm	195 kg	5
Trench bucket	0.09 m ³	1 ft	122 kg	3
Trench bucket	0.12 m ³	1.5 ft	135 kg	3
Ditch cleaning bucket	0.35 m ³	945mm	220 kg	NA

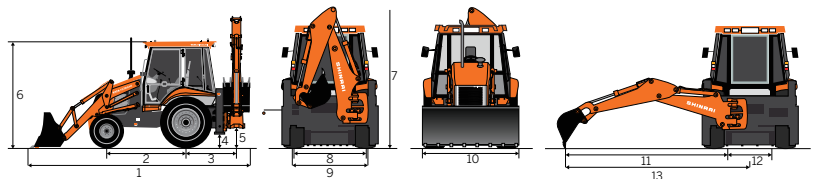
LOADER BUCKET OPTIONS

Type	Bucket size	Bucket width	Bucket weight	No. of tooth point
Loader bucket	1.1 m ³	2352 mm	560 kg	8
6 in 1 Loader bucket	1.0 m ³	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

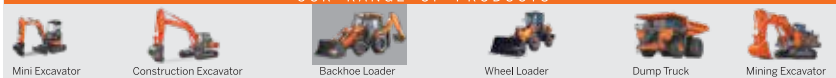


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OUR RANGE OF PRODUCTS



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.