

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 | Rear Axle |
| <ul style="list-style-type: none">• 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 | <ul style="list-style-type: none">• Rear heavy-duty Carraro axle• High brake torque |

SPEEDS

Speeds @ 1950 rpm with standard tyres

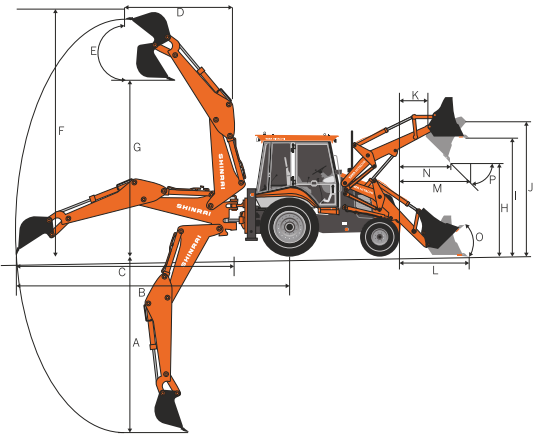
Forward	Reverse
1st..... 5 kmph	1st..... 6 kmph
2nd..... 8 kmph	2nd..... 9 kmph
3rd..... 17 kmph	3rd..... Not recommended
4th..... 32 kmph	4th..... Not recommended

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
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

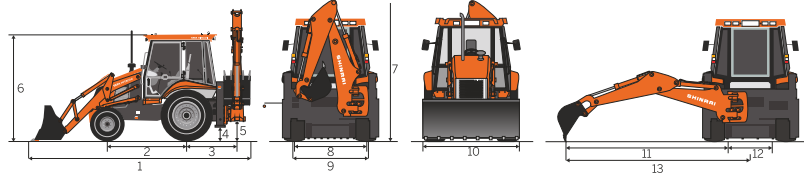
LOADER BUCKET OPTIONS

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

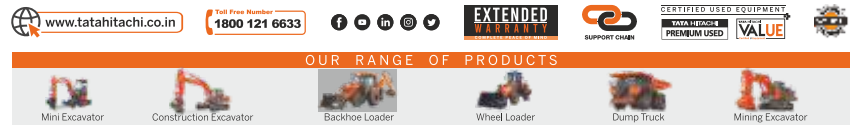
Dim. Notations	Dimension	Description
1	6,040	Transport length
2	2,130	Wheel base
3	1,370	Slew centre to rear axle centre
4	320	Minimum ground clearance
5	485	Slew ground clearance
6	2,940	Height of cabin
7	3,530	Machine Transport Height
8	1,900	Front wheel tread width
9	1,700	Rear wheel tread width
10	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

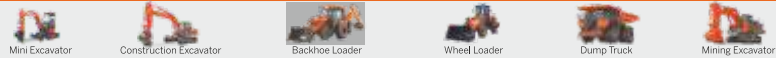


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OUR RANGE OF PRODUCTS



TATA HITACHI

Reliable solutions

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SHINRAI PRIME

• RELIABLE • TRUSTWORTHY • CAPABLE



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

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.

TPOV SHINRAI PRIME 8912 DEC2022

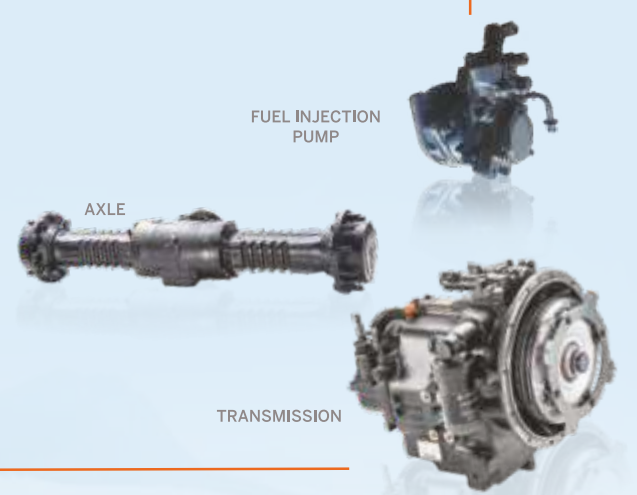


RELIABLE ENGINE FOR EXCEPTIONAL PERFORMANCE

- 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

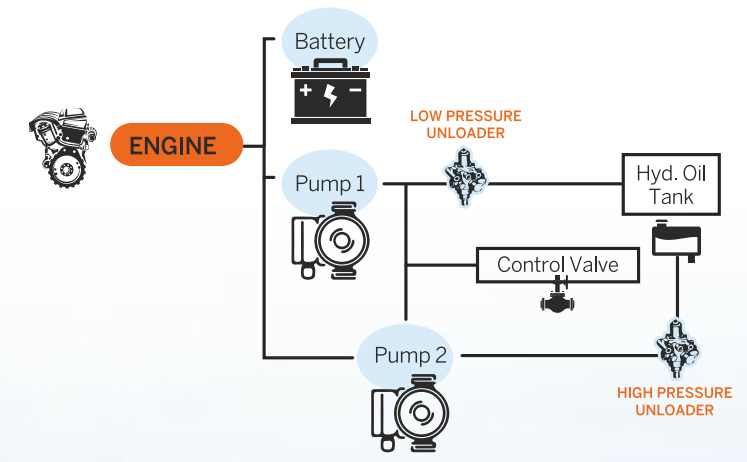
- Electronically controlled parameters for optimized performance and increased life
- Proven transmission and axle system
- Rotary fuel injection pump
- 4 wheel drive*



4x4

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

EHS
Every Hour Saving



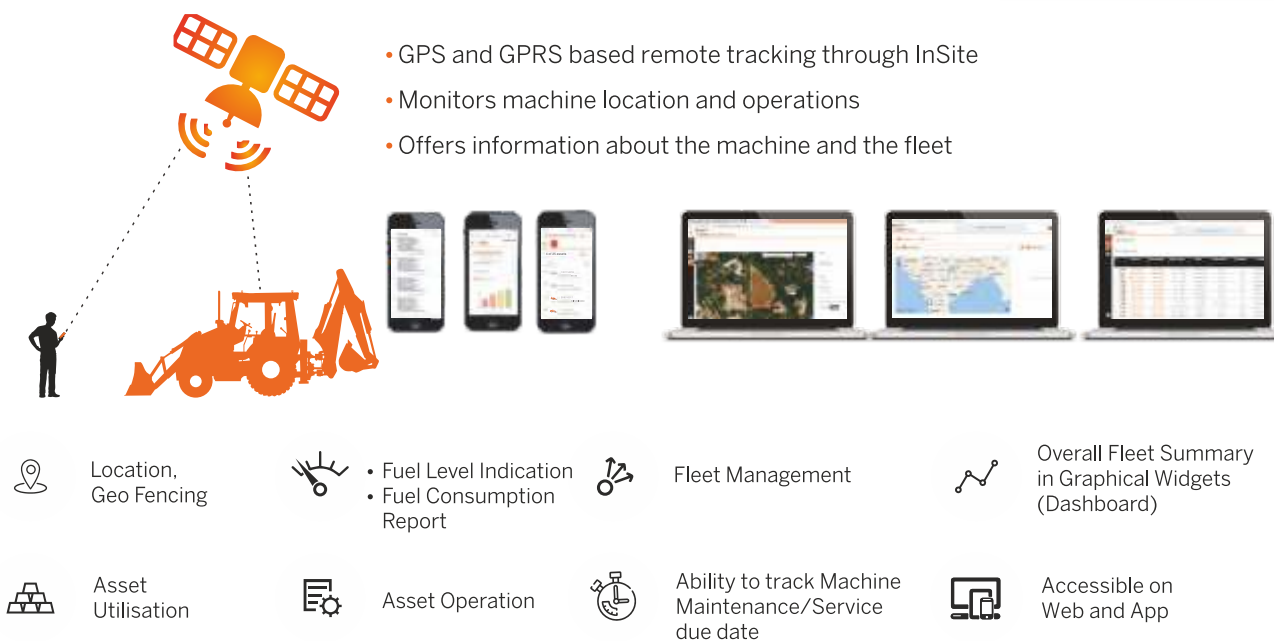
A CABIN THAT OFFERS MAXIMUM COMFORT AND SAFETY



- 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*
- Meets FOPS* safety requirements
- Quieter engine
- Powerful music system with FM, USB, AUX, Bluetooth connectivity and calling facility.
- Fuel theft alarm
- Machine theft alarm

TELEMATICS SUITE FOR REAL TIME MONITORING

inSite
INSIGHTS INTO YOUR JOB SITE



ULTIMATE SUPPORT FOR THE ULTIMATE MACHINE

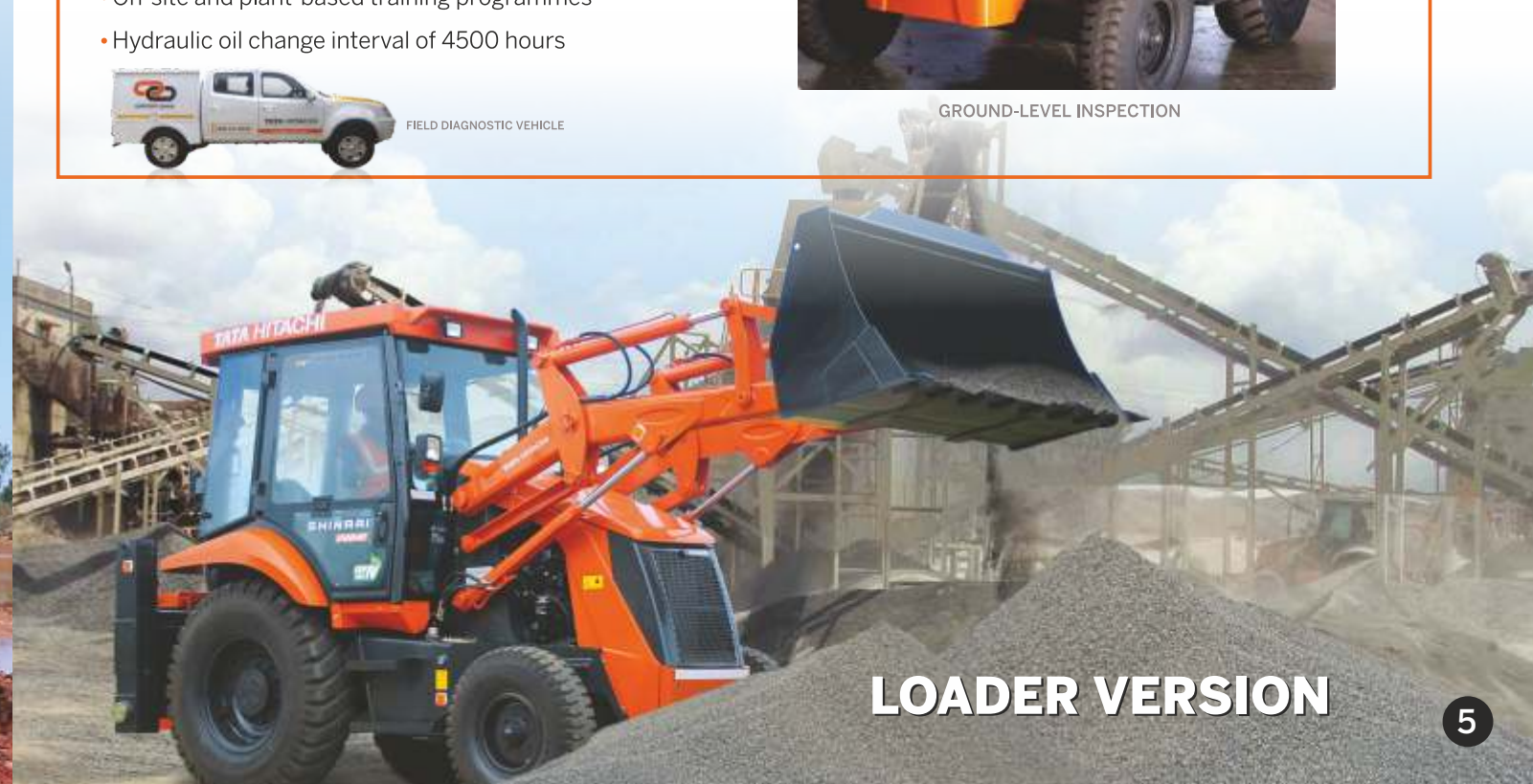
- Warranty, extended warranty and post-warranty services.
- On-site services through a wide network of dealerships
- Fault codes display in the cluster for ease of maintenance and troubleshooting
- Field diagnostic vehicle for immediate on-site resolution
- On-site and plant-based training programmes
- Hydraulic oil change interval of 4500 hours



SUPPORT CHAIN



GROUND-LEVEL INSPECTION



LOADER VERSION

A RANGE OF ATTACHMENTS



Extensively used for demolition applications

ROCK BREAKER

Specifications

- Operating Weight- 431 kg
- Operating Pressure- 100 to 140 bar
- Impact Blow Rate- 350 to 850 bpm

Used for drilling, Pole erection, Plantation, Fencing, Casing applications

AUGER

Specifications

- Torque Range- 2717 NM to 8152 NM
- Oil Pressure Range- 80 to 240 bar
- Diameter- 150 mm-1200 mm

Pallet Handling, Container loading

FORKLIFT

Specifications

- Lifting Capacity- 1500 kg
- Fork Length- 1220 mm

Container movements & Other material lifting

JIB CRANE

Specifications

- Lifting Capacity- 1000 kg
- Distance from Fron Tyre-3897 mm
- Lift Height from Ground- 5318 mm

Allows fast changeover of buckets and attachments.

QUICK COUPLER

Specifications

- Operating Weight- 87 kg
- Front & Rear Pin Diameter- 50 & 55 mm

Urban development & Bush cutting

MULCHER

Specifications

- Drum Speed- 2400 RPM
- Cutting Drum Width-1000 mm
- Oil Pressure- 160 bar-180 bar

Used for pulling a block of rock or concrete.

RIPPER TOOTH

Specifications

- Digging Force- 5685 kgf

Iron & Wooden block handling

GRAPPLE

Specifications

- Lifting Capacity- 1000 kg
- Distance from Fron Tyre-3897 mm
- Lift Height from Ground- 5318 mm

Leveling & Dozing

DOZER BLADE

Specifications

- Width- 366 mm
- Length- 2357 mm
- Height- 874 mm

Leveling, Dozing, loading, Grabing, grading, Digging

6IN1 LOADER BUCKET

Specifications

- Bucket Capacity- 1.0 m³
- Bucket Width-2350 mm
- Number of Tooth Points- 8

Trenching (OFC, Pipe laying & Drainage construction)

TRENCH BUCKET

Specifications

- Bucket Capacity- .09 m³
- Bucket Width-1 ft
- Number of Tooth Points- 3

Sewage cleaning & Muncipal work

DITCH CLEANING BUCKET

Specifications

- Bucket Capacity- .35 m³
- Bucket Width- 945mm

High dump truck loading, Wagon loading

BOOSTER LOADER BUCKET

Specifications

- Max. Loading Height- 4312 mm
- Bucket Capacity- 1.1 m³
- Reach at Full Height-2345 mm

Specific high reach applications

LONG BACKHOE ARM EXTENSION

Specifications

- Max. Cutting Height- 6946 mm
- Max. Reach- 6334 mm

Bush trimming

HEDGE TRIMMER

Specifications

- Max. Cutting Diameter- 40 mm
- Max. Cutting Length-1500 mm
- Back Pressure- 20 bar

Cable laying, Drainage & Irrigation, Gas and Water piping

TRENCHER

Specifications

- Width- 1018 mm
- Length-2262 mm
- Cutting Width Range- 150 mm-300 mm

4 METRE DUMP HEIGHT

