

SPECIFICATIONS

ENGINE

Make Cummins
 Model 4B3.3T-35.1-C
 Type Turbo-charged, Water Cooled, 4-cycle diesel engine
 Gross Power 47 Hp (35.1 kW) @ 2,200 RPM
 Max. Torque 215 Nm @ 1,320 RPM
 Battery 12 V, 130 Ah
 No. of Cylinders 4 nos
 Bore 95 mm
 Stroke 115 mm
 Displacement 3,261 cc
 Alternator 120Amps

HYDRAULIC SYSTEM

Intelligent Optimum Hydraulic system, Variable Displacement Pump with Electric Displacement Control and Load Sense to optimize fuel consumption
 System Pressure 265 bar
 Max. Pump Flow 105 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
- Rear Axle**
 - Rear heavy-duty Carraro axle
 - High brake torque

SPEEDS

Speeds @ 1950 rpm with standard tyres

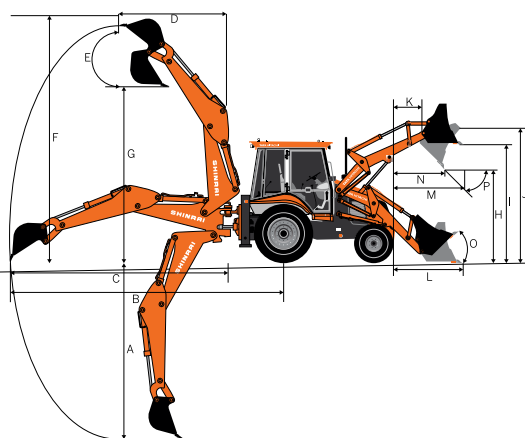
- Forward**
 - 1st 5 kmph
 - 2nd 7 kmph
 - 3rd 16 kmph
 - 4th 28 kmph
- Reverse**
 - 1st 5 kmph
 - 2nd 7 kmph
 - 3rd Not recommended
 - 4th Not recommended

BACKHOE PERFORMANCE

Backhoe Bucket digging force 6.026 kgf Backhoe Arm Length 1.96 m
 Backhoe Arm digging force 3.087 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 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 100 L
 Engine Oil 11 L
 Engine Coolant 13 L
 Transmission Oil 20 L
 Rear Axle Oil 17.5 L
 Hydraulic Oil Refill 65 L

LOADER PERFORMANCE

Below ground dig depth 75 mm
 Loader bucket break-out force 5,722 kgf
 Loader arm break-out force 5,139 kgf
 Payload 1,800 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 |

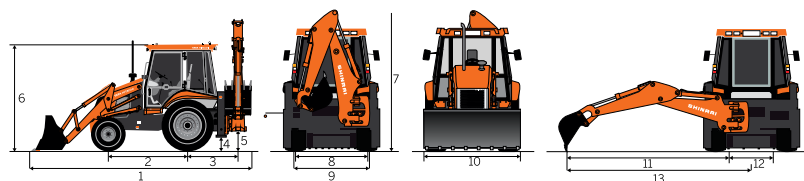
LOADER BUCKET OPTIONS

| 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 | 1,710 | 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



Reliable solutions

NEW!

SHINRAI PRO

• RELIABLE • TRUSTWORTHY • CAPABLE

Your True Partner in Progress



PRO FICIENCY
PRO FITABILITY
PRO GRESS

Tata Hitachi Construction Machinery Company Private Limited

Registered Office: Jubilee Building, 45 Museum Road, Bangalore, India 560025
 Telephone: +9180 66953301 / 02 / 03 / 04 / 05 | Email: info@tatahitachi.co.in

www.tatahitachi.co.in 1800 121 6633



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.

Model

SHINRAI PRO

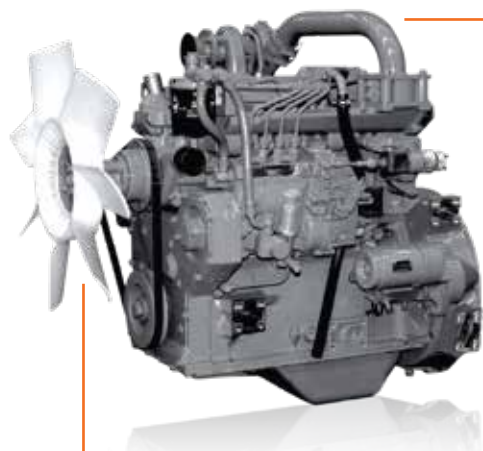
Operating Weight

STD: 7940 Kg

Bucket Capacity

Backhoe: 0.26 m³ | Loader: 1.1 m³

TCL/SHINRAI-PRO/8P/7E/MAR/2022



RELIABLE ENGINE FOR EXCEPTIONAL PERFORMANCE

- New fuel efficient reliable engine
- Superior engine performance
- 4 valve per cylinder
- Inline fuel injection pump for easy maintenance
- Zero maintenance cyclonic pre-cleaner



RELIABLE DRIVE LINE FOR TOP-NOTCH PERFORMANCE

- Electrically controlled parameters for optimized performance and increased life
- Proven transmission and axle system
- Easy maintenance



AXLE



TRANSMISSION

INTELLIGENT OPTIMUM HYDRAULIC SYSTEM **OHS**

- Provides great performance with fuel efficiency
- Expert hydraulic flow optimization through intelligent controller and variable displacement pump to match high performance at lower fuel consumption
- Ensures optimal utilisation of engine and hydraulic power
- Long lasting hydraulic hoses for superior life



CONTROL VALVE



VARIABLE DISPLACEMENT PUMP
(EDS + LS)



CONTROLLER

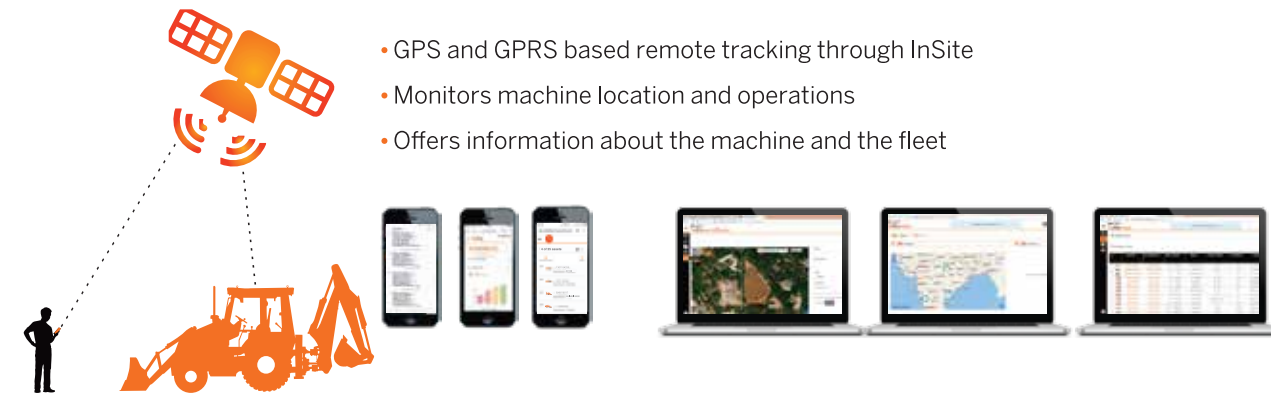


A CABIN THAT OFFERS MAXIMUM COMFORT AND SAFETY



- Well ventilated and spacious cabin
- Excellent visibility
- Comfortable operator seat
- Large leg space for comfortable operation
- Ergonomic controls
- User-friendly consoles
- Ample storage space
- Meets FOPS* safety requirements
- Quieter engine
- Powerful music system with FM, USB, AUX, Bluetooth connectivity and calling facility.

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
- Field diagnostic vehicle for immediate on-site resolution
- On-site and plant-based training programmes
- Hydraulic oil change interval of 4500 hours



GROUND-LEVEL INSPECTION



FIELD DIAGNOSTIC VEHICLE



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, Grabbing, grading, Digging

6IN1 LOADER BUCKET

Specifications

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

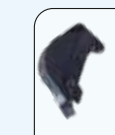


Trenching (OFC, Pipe laying & Drainage construction)

TRENCH BUCKET

Specifications

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




Sewage cleaning & Muncpal 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

