

# TATA HITACHI

Reliable solutions

## TH 86

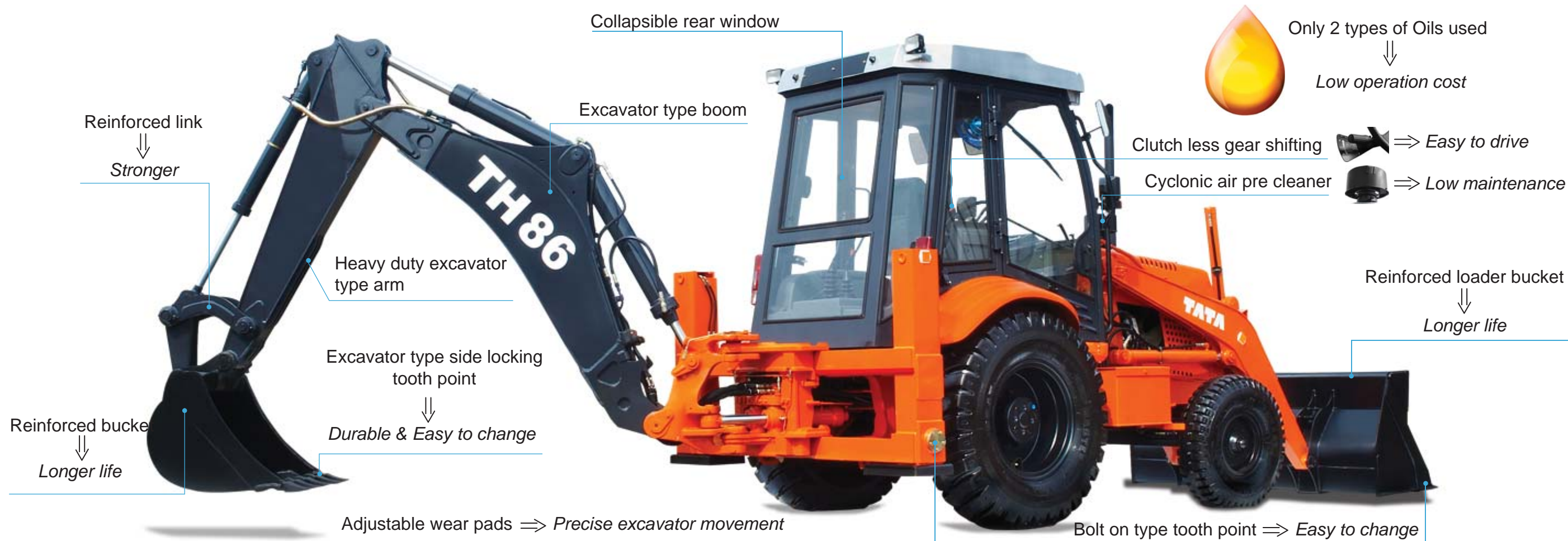
*Tough.*



### EXCAVATOR LOADER

Gross Power	: 86 PS @ 2200 rpm
Operating Weight	: 7500 kg
Bucket Capacity	
Backhoe	: 0.30 m <sup>3</sup>
Loader	: 1.0 m <sup>3</sup>

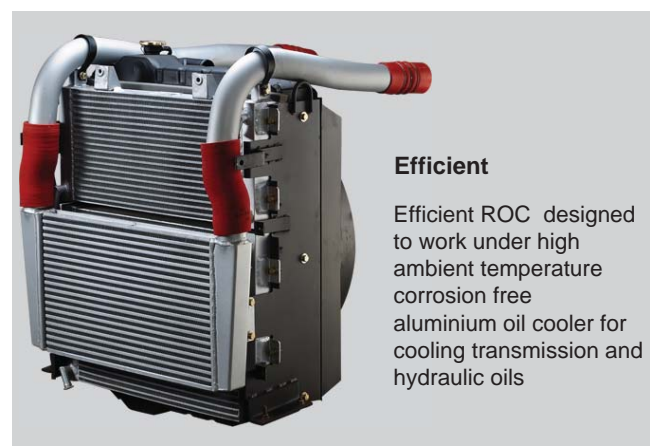




**Powerful**

BS III compliant, 4 cylinder, water cooled, Turbo charged engine with Intercooler. Proven TATA Engine with in-line fuel pump designed to work in Indian conditions

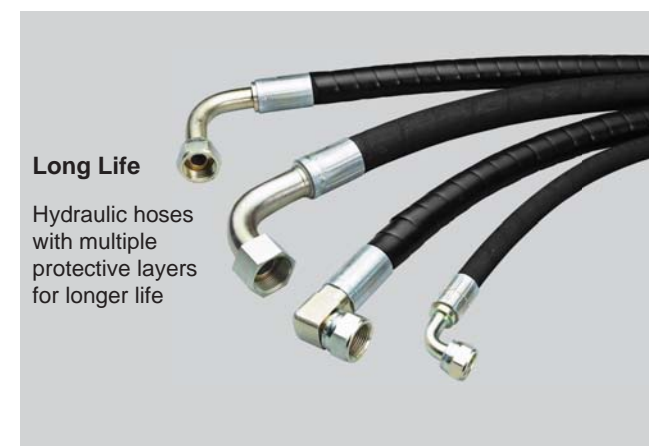
**ENGINE**



**Efficient**

Efficient ROC designed to work under high ambient temperature corrosion free aluminium oil cooler for cooling transmission and hydraulic oils

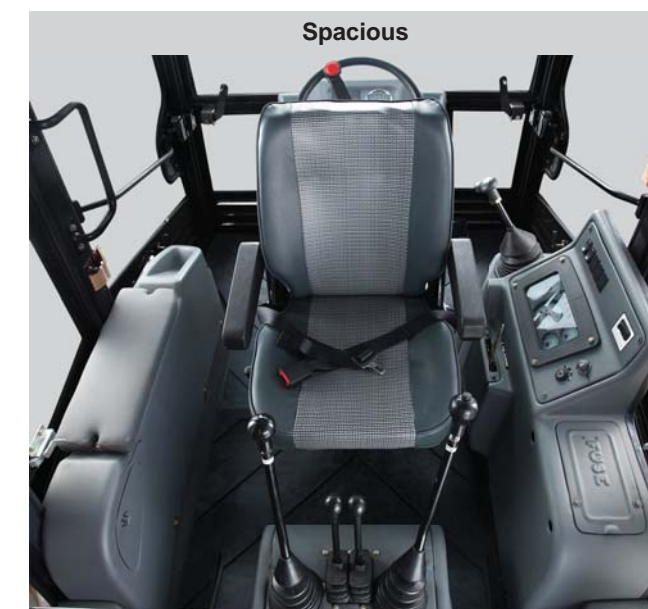
**ROC**



**Long Life**

Hydraulic hoses with multiple protective layers for longer life

**HOSES**



**Spacious**

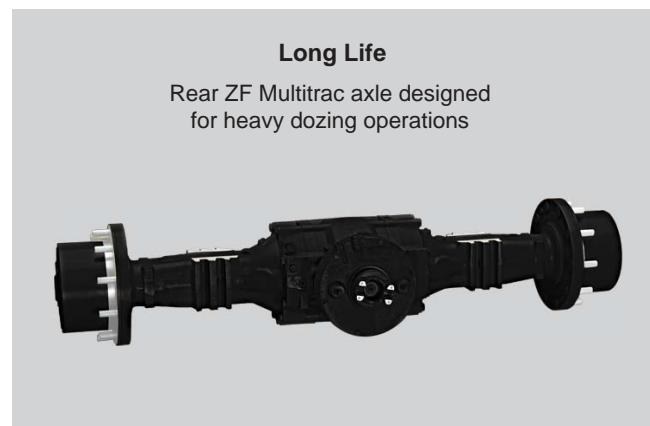
Spacious cabin with helper seat, ergonomically designed instrument panels and control levers for better operator comfort



**Long Life & Higher Speeds**

Durable ZF Powershift transmission with extended service life

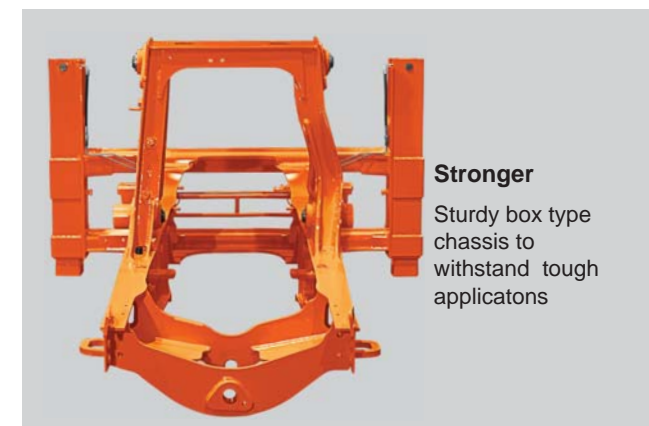
**TRANSMISSION**



**Long Life**

Rear ZF Multitrac axle designed for heavy dozing operations

**AXLE**



**Stronger**

Sturdy box type chassis to withstand tough applications

**FRAME**



**Comfortable**

Deluxe operator seat with height adjustment, arm rest and seat belt

**CABIN**

# SPECIFICATIONS

## ENGINE

Make & Model.....TATA 497 TCIC  
 Type.....Turbo Charged, Inter Cooled 4 Cylinder Diesel Engine  
 Gross Power.....86 PS @ 2200 rpm  
 Max.Torque.....31 kg-m  
 Battery.....12 V-130 AH

## POWER MODES

SP - Mode.....Super power for extra heavy duty work  
 P - Mode.....For Normal to powerful applications

## HYDRAULIC SYSTEM

Efficient hydraulic system with gear type TANDEM heavy duty pump

	Flow @ 2200 rpm	Pressure
<b>Backhoe</b>	136 lpm	230 bar
<b>Loader</b>	106 lpm	210 bar

Filter

Return oil, spin-on type, replaceable, 10 micron element.

## TRANSMISSION

TH 86 is equipped with fully Powershift transmission sourced from the internationally renowned ZF, with heavy duty clutch packs for smooth and easy click of the knob gear shift. The integral Torque converter has stall ratio of 1:2.63 which increases the tractive effort, making dozing operation easy in tough conditions.

## AXLES

### Front Axle

The rigid non-powered front axle for two wheel drive version can float 18° to take care of unevenness of ground.

### Rear Axle

Rear ZF Multitrac Axle is a heavy duty, long-life axle. High brake torque is assured by internal wet multi-disc brakes that are self adjusting and require little maintenance. Parking Brake is spring applied hydraulically released which is enclosed in the axle housing and provides full protection from damage, dirt and corrosion.

\*Also available 4x4 option

## TRAVEL SPEEDS

Travel speeds with standard rear tyres. (16.9-28, 12 PR)

	Forward	Reverse
Gear 1	6 kmph	7 kmph
Gear 2	10 kmph	13 kmph
Gear 3	21 kmph	21 kmph
Gear 4	36 kmph	

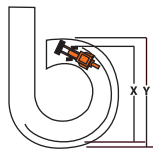
## TURNING RADIUS 2WD

### X Curb turning circle

With brakes.....7868 mm  
 Without brakes.....8808 mm

### Y Bucket clearance circle

With brakes.....9560 mm  
 Without brakes.....10500 mm



## REFILL CAPACITIES

Fuel tank (with ground level fueling).....136.0 ltr  
 Engine coolant.....21.9 ltr  
 Engine oil including filter.....9.0 ltr  
 Transmission.....13.0 ltr  
 Hydraulic system.....91.0 ltr  
 Rear axle.....16.0 ltr  
 Front Wheel (only for 4WD).....8.0 ltr

## BUCKETS

Loader End	Width	Capacity	Weight
Tilt dump bucket	2346 mm	1.00 m <sup>3</sup>	555 kg
Bottom dump (6-in-1) bucket	2350 mm	1.00 m <sup>3</sup>	640 kg
Backhoe End	Width	Capacity	Weight
General purpose bucket	765 mm	0.30 m <sup>3</sup>	205 kg
Heavy-duty bucket	610 mm	0.25 m <sup>3</sup>	189 kg

The 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

## Tata Hitachi Construction Machinery Company Limited

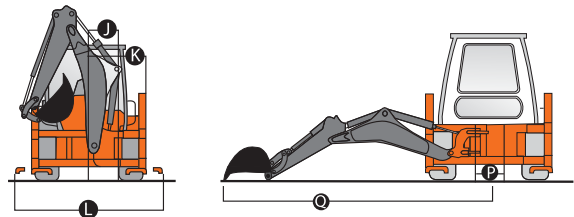
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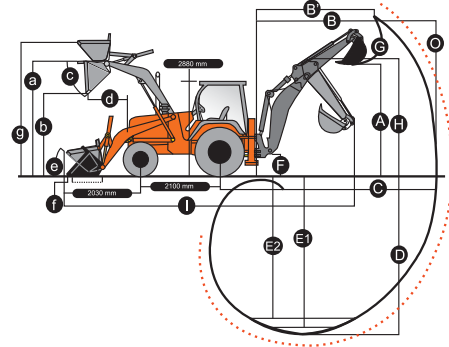


## TYRES

**Front Tyres** (standard).....9-16, 16 PR  
 (optional).....12.5-8, 12 PR  
**Rear Tyres** (standard)...Industrial tyres.....16.9-28, 12 PR  
 (optional)...Heavy duty tyres.....14-25, 20 PR



Options : Rock breaker / Frok lift / Jib Crane / Single Point Ripper  
 Tooth / Trenching Bucket / Long arm Backhoe Option also Available



Loader Performance	Bucket Types	
	Tilt Dump Bucket	Bottom Dump (6-in-1) Bucket
Break force	4140 kgf	3765 kgf
Lifting capacity, full height	2790 kg	2631 kg
a. Height to bucket hinge pin, maximum	3400 mm	3400 mm
b. Dump clearance, bucket at 45°	2640 mm	2620 mm
c. Bucket dump angle, maximum	45°	45°
d. Reach at full height, bucket at 45°	765 mm	818 mm
e. Rollback angle at ground level	40°	40°
f. Digging depth below ground, bucket level	206 mm	185 mm
g. Max. operating height	3820 mm	3820 mm

Backhoe Performance	Boom Length : 2.56 m	
	Standard arm* Arm Length 1.72 m	Longer arm 2.61 m
<b>Digging force, bucket cylinder : 5400 kgf</b>		
<b>Digging force, arm cylinder : 3400 kgf</b>		
<b>A</b> Loading height, truck loading position	3560 mm	4140 mm
<b>B</b> Max. reach from centre of swing point at ground	5460 mm	6300 mm
<b>C</b> Reach from centre of rear axle	6910 mm	7730 mm
<b>D</b> Maximum digging depth	4290 mm	5160 mm
<b>E</b> Digging depth		
(E1) 610 mm flat bottom	4240 mm	5110 mm
(E2) 2440 mm flat bottom	3940 mm	4905 mm
<b>F</b> Ground clearance, minimum	350 mm	350 mm
<b>G</b> Bucket rotation	190°	190°
<b>H</b> Transport height	3670 mm	3725 mm
<b>I</b> Overall length, transport	5260 mm	5600 mm
<b>J</b> Side-shift from tractor centre line	582 mm	582 mm
<b>K</b> Wall to swing centre line	580 mm	580 mm
<b>L</b> Stabilizer width	2290 mm	2290 mm
Lift capacity to bucket pivot	1699 kg	1100 kg
<b>O</b> Maximum cutting height (stab. full open)	5800 mm	6350 mm
(stab. closed)	5300 mm	6000 mm
<b>P</b> Total side shift travel	1150 mm	1150 mm
<b>Q</b> Max. side reach (with side shift) from centre of machine	5978 mm	6778 mm

\*All backhoe specification are with 0.3 m<sup>3</sup> bucket.

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