

HB640

HYUNDAI BACKHOE LOADER



* Photo may include optional equipment.



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PLEASE CONTACT

HB640 S/C
Perkins E/G, Tier III

HB640 S
Perkins E/G, Tier III,
4-wheel Steering System

HB640 S/C
Kirloskar E/G, Tier II

HB640 S/C
Kirloskar E/G, Tier III



PRIDE AT WORK

Hyundai strives to build state-of-the-art earthmoving equipment to give every operator maximum performance, more precision, versatile machine preferences and proven quality.

Take pride in your work with a Hyundai!

HB640

POWERFUL AND RELIABLE ENGINE

- PERKINS 1104D-44TA engine with EU NRMM 97/68/EC, EURO III A
- KIRLOSKAR 4R 1040T with EU STAGE II regulation built for power, reliability and efficiency

COMFORTABLE OPERATION

- Up-level cabin with ROPS / FOPS certified design for safe operation
- Tilting, adjustable steering column
- Hinged-type windows for excellent ventilation
- Ergonomic design and location of gauges, switches and levers for quick and easy use
- Suspension seat with full adjustment for improved operator comfort

ADVANCED PERFORMANCE SYSTEM

- Adjustable flow control system (AFCS) optimizes the travel power of the machine when traveling on the highway
- Smooth Ride Control (SRC) system reduced cycle times, higher productivity and better fuel efficiency
- 4-wheel steering system offers Maneuverability, Stability, Turning radius, Versatility and Efficiency

BEST IN SEGMENT PRODUCTIVITY

- 15% higher breakout force
- 4% larger bucket capacity
- 10% more traction
- Highest bucket reach with various loader and backhoe attachments
- Optimized engineering with global key components allows more power, less fuel and higher efficiency

EXCELLENT VISIBILITY

- One piece rounded windshield for wide span of view
- Well designed loader frame offers excellent visibility

SEVICEABILITY

- Tilt-up hood provides easy access to engine compartment
- All greasing and filter points accessible from ground level for safety and reduce maintenance time
- Single layer cooling compartment-Easy to clean



* Photo may include optional equipment.

OUTSTANDING PERFORMANCE



Advanced performance system

- Adjustable flow control system (AFCS) optimizes the travel power of the machine when traveling on the highway.
- Smooth Ride Control (SRC) system reduced cycle times, higher productivity and better fuel efficiency

Best in Segment Productivity

- 15% higher breakout force.
- 4% larger bucket capacity.
- 10% more traction.
- Highest bucket reach with various loader and backhoe attachments.

Four Wheel Drive Standard

Four wheel drive system improves mobility and loader performance in ground conditions underfoot and can be activated on-the-go.

4-Wheel Steering System Option

Designed to offer greater vehicle maneuverability while parking at low speeds and on tight off-road trails. The system increases low-speed agility and allows the driver to achieve a tighter turn circle or narrow spaces. Also designed to help improve vehicle stability when towing a trailer.

Smooth Ride Control System Option

Ride control system is available for improved operator comfort. Ride control reduces bounce and shock when traveling on the job site. The system is designed to minimize loader lift bounce when traveling over rough terrain to reduce material spillage and improve travel with a full bucket. The operator can engage ride control by flipping the switch on the side console. Ride control improves job site productivity, operator comfort and overall safety. Smooth Ride Control (SRC) system reduced cycle times, higher productivity and better fuel efficiency.

Powerful and Reliable Engine

- PERKINS 1104D-44TA engine with EU NRMM 97/68/EC, EURO III A
- KIRLOSKAR 4R 1040T with EU STAGE II regulation built for power, reliability and efficiency.

Working Lamp

4x4 LED Working lamp as standard provides excellent view in any operating environment

Top level of Bucket Capacity

1.26m³ bucket for loader, 0.22m³ bucket for backhoe as standard offer 5-10% larger capacity than any competitors.



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ENHANCED HYDRAULIC MECHANISM

Innovative hydraulic technologies make the HB640 series fast, smooth and easy to control.

Carlisle Brake U.S.A



Hydro control / Walvoil (Italy) Valve



World Famous Carraro (Italy) Axle



World famous Casappa(Italy) Pump



Single Layer Radiator Cooler (Germany) SBS - Side by Side



World Famous Carraro(Italy) Transmission



Feature
96 HP Proven Kirloskar Engine
4R1040T, Euro II,
100HP Perkins Engine
1104D-44TA EU IIIA.

Advantage
Most reliable, powerful.

Benefit
Fuel efficient engine in off highway application.



Feature
Engine has wet liners in Cylinders.

Advantage
Easy & cheaper to repair.

Benefit
Very Low Repair cost vis a vis JCB where engine has to be replaced as can not be repaired.

Ergonomic design for operators

- Great vision with curved windshield.
- Plenty of legroom minimizes fatigue and allows the operator to work un-interrupted for long hours.
- A fully adjustable seat (Air-suspension) combined with ergonomically positioned controls.

Excellent Visibility

One-piece rounded front glass and large windows around the cab provide the operator with a full 360 degree range of visibility. Wide upper front window good visibility to cutting edge of bucket for loader. Sloped and narrow bonnet is designed for easy and safe work with the front loader.



Climate Control System Option

A full heating, defrosting system keeps the operator comfortable with 15 air vents placed throughout the cab. Air conditioning system as an option well placed air vents within front, back and sides of seat provides operator with optimum temperature.

Power Shift Transmission

Standard power shift transmission provides fast, easy and efficient operation. A convenient gear/shift selector allows for gear selection and forward, neutral or reverse direction.



Brakes

Oil immersed wet disc brakes are individually actuated by two separated brake pedals. Brakes are self adjusting for improved service life.



Side Console with Full Instrumentation

In the HB640 series cab, all gauges switches and levers are conveniently located for easy access. Whether in the loader position or the backhoe position, the operator can easily reach all controls.



Operator Comfort

HB640 series backhoe loaders are designed for the operator's comfort. The steering column and backhoe control tower can be tilted and adjusted for convenient operation. Deluxe, joystick levers, conveniently located switches and an AM/FM radio with mp3 input provide the pleasant operation. Hinge-type side windows can be opened for improved ventilation. Additionally, front and rear windshield wipers are equipped for excellent visibility during bad weather conditions.



COMFORTABLE OPERATION

Hyundai's deluxe design cabin maximizes operator comfort. World class cabin with great visibility, comfort, convenient and safety features.

SERVICEABILITY



* Photo may include optional equipment.

Quick and Easy Maintenance

Tilt-up hood provides easy access to the engine compartment. The one-piece hood tilts away for easy ground access to all critical services and grease points for maintenance and operator safety.

Integrated Safety Bar

An integrated safety bar and locking pin are an integral part of the bucket cylinder, and guarantee operator safety when servicing.



Visible Hydraulic Oil Sight gauge

The hydraulic oil sight gauge is installed on the side of the hydraulic tank for the convenient inspection from on ground level.



SPECIFICATIONS

SPECIFICATIONS		UNIT	HB640 S/C (TIER3)	HB640 S 4WS(TIER3)	HB640 S/C (TIER2)	HB640 S/C (TIER3)	
GENERAL	ENGINE HORSE POWER	HP	100				
	OPERATING WEIGHT(SS)	STANDARD	kgf	8,500	8,870	8,500	
		MAXIMUM	kgf	9,240	9,610	9,240	
	OPERATING WEIGHT(CP)	STANDARD	kgf	7,780	NA	7,780	
		MAXIMUM	kgf	8,520		8,520	
	DIGGING DEPTH(SS)	mm	STD DIPPER = 4,770 TELESCOPIC DIPPER = 5,830				
DIGGING DEPTH(CP)	mm	STD DIPPER = 4,820 TELESCOPIC DIPPER = 5,930					
ENGINE	MAKE	-	PERKINS		KIRLOSKAR		
	MODEL	-	1104D-44TA		4R1040T	4R1040TA1	
	POWER	GROSS	HP/RPM	100/2,200		96/2,200	90/2,200
		NET	HP/RPM	86.5/2,200		86/2,200	80/2,200
	TORQUE	GROSS	Nm/RPM	410/1,400		375/1,400	350/1,400
				4			
	NO.OF CYLINDERS	EA					
	DISPLACEMENT	liter	4.4		4.16		
ASPIRATION	-	Turbocharged +Intercooled		Turbocharged	Turbocharged +Intercooled		
ELECTRICALS	ALTERNATOR	AMP	120		90		
	BATTERY	V-CCA	12V X 1050CCA				
DRIVE LINE	4WD	-	STD				
TM	GEAR SHIFT TYPE	-	Automatic with manual power shift option	Manual synchro shift option	Automatic with manual power shift option	Manual synchro shift option	
	TRAVEL SPEEDS	km/h	Forward Max:38.8 Reverse Max:20.3 (3rd Gear recommended)	Forward Max:41 Reverse Max:20.3 (3rd Gear recommended)	Forward Max:36 Reverse Max:18 (3rd Gear recommended)	Forward Max:40 Reverse Max:20.3 (3rd Gear recommended)	
AXLE	STEER TYPE	-	Two wheel power steering		Four wheel power steering with 3 modes (Circular mode, crab mode and Two wheel steer mode)	Two wheel power steering	
	DIFFERENTIAL LOCK	FRONT(4WD)	-	Normal			
		FRONT OSCILLATION ANGLE	Deg	±7			
TIRE	FRONT	4WD	-	12.5/80x18-12PR Optional:400x70_20-16PR	16.9x28-12PR	12.5/80x18-12PR Optional:400x70_20-16PR	
	REAR		-	16.9x28-12PR Optional:19.5LX24-12PR	16.9x28-12PR	16.9x28-12PR Optional:19.5LX24-12PR	
BRAKE	SERVICE	-	Wet discs				
	PARKING	-	Wet discs-Hand operated				
TURNING DIAMETER	TYRES COMBINATION	-	12.5/80x18-12PR, 16.9x28-12PR	400x70_20-16PR, 16.9x28-12PR	16.9x28-12PR, 16.9x28-12PR	12.5/80x18-12PR, 16.9x28-12PR	
	UNBRAKED (OUTSIDE OF TIRE)	mm	9,150	9,530	11,300	9,150	
	LOADER CLEARNCE	mm	11,800	12,000	13,100	11,800	
HYD.SYSTEM	SYSTEM TYPE	-	Open Center				
	MAIN PUMP TYPE	-	Gear pump				
	PUMP CAPACITY	LPM	145 @2,200 rpm				
	MAIN RELEIF PRESSURE	kg cm ² (bar)	234.5(230)				
SERVICE REFILL CAPA.	FUEL TANK	liter	145				
	COOLING SYSTEM	liter	15				
	ENGINE OIL WITH FILTER	liter	10 TO 12		12		
	4WD TOTAL SYSTEM	liter	16(Automatic with manual power shift option)	12 TO 13 (manual synchro shift option)	16(Automatic with manual power shift option)	12 TO 13(manual synchro shift option)	
	4WD FRONT AXLE	DIFFERENTIAL	liter	6.5		6.5	
		HUB REDUCERS	liter	1.25 each side		1.25 each side	
	REAR AXLE	DIFFERENTIAL	liter	14			
		HUB REDUCERS	liter	1.5 each side			
HYD.SYSTEM TOTAL	liter	120					
HYD.TANK WITH FILTER	liter	100(Refill capacity)					

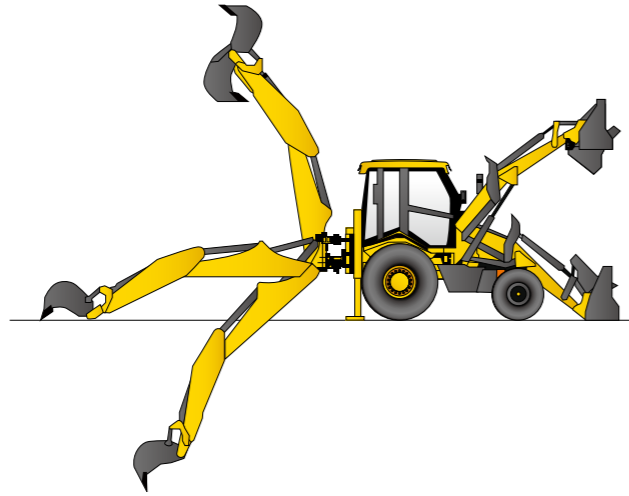
EXCAVATOR & LOADER PERFORMANCE

Unit : mm (ft-in)

	BACKHOE LOADER SIDE SHIFT		BACKHOE LOADER CENTER PIVOT	
	HB640			
	Retraction STD	Telescopic Dipper (option)	Retraction STD	Telescopic Dipper (option)
	Meters	Meters		
STANDARD GP BUCKET CAPACITY	0.22 m ³			
MAXIMUM DIG DEPTH	4.77 m	5.83 m	4.82 m	5.93 m
REACH GROUND LEVEL TO REAR WHEEL CENTRE	6.77 m	7.8 m	6.77 m	7.8 m
REACH GROUND LEVEL TO SLEW CENTRE	5.47 m	6.5 m	5.47 m	6.5 m
REACH AT FULL HEIGHT TO SLEW CENTRE	2.82 m	3.61 m	2.82 m	3.61 m
STABILIZER SPREED			3.87 m	3.87 m
MAXIMUM WORKING HEIGHT	5.98 m	6.89 m	6.17 m	7.04 m
MAXIMUM LOAD OVER HEIGHT	4.19 m	5.19 m	4.48 m	5.36 m
REACH OVER THE SIDE FROM STABILIZER				3.62 m
GROUND CLEARANCE				360 mm
BUCKET ROTATION- POWER	201° SQUARE CUT BUCKET			
BUCKET TEAR OUT FORCE	6,320 Kgf			
DIPPER TEAR OUT FORCE	3,580 Kgf			
LIFT CAPACITY TO BUCKET PIVOT AT FULL REACH (WITHOUT BUCKET FITTED)	1,642 Kgs			

	STANDARD BUCKET WITHOUT LINK BRACKET	6 IN 1 BUCKET WITHOUT LINK BRACKET
	Meters	Meters
BUCKET CAPACITY	1.26 m ³	1.1 m ³
DUMP HEIGHT	2.96 m	2.96 m
LOAD OVER HEIGHT	3.39 m	3.39 m
PIN HEIGHT	3.61 m	3.61 m
PIN FORWARD REACH	0.42 m	0.54 m
REACH AT GROUND	1.47 m	1.75 m
MAX.REACH AT FULL HEIGHT	1.28 m	1.44 m
REACH AT FULL HEIGHT BKT DUMPED	0.89 m	1.17 m
BELOW GROUND LEVEL DIG DEPTH	0.1m	0.16 m
ROLL BACK AT GROUND	50°	50°
DUMP ANGLE	45°	45°
WIDTH OVER BUCKET	2.35 m	2.43 m
SHOVEL BREAK OUT FORCE	8,793 kgf	8,793 kgf
LOADER ARM BREAK-OUT FORCE	5,642 kgf	5,642 kgf
PAY LOAD	2,000 kgf	2,000 kgf
LIFTING CAPACITY AT LOADER ARM HOOK PIN (Additional Information-If required we can provide)	3,600 kgf	3,600 kgf

DIMENSIONS



	HB640	HB640 4WS
	Meters	Meters
OVERALL LENGTH	6.04 m	6.04 m
WHEELBASE	2.22 m	2.22 m
KING POST TRAVEL	1.18 m	1.18 m
MINIMUM GROUND CLEARANCE	0.48 m	0.48 m
SLEW GROUND CLEARANCE	0.65 m	0.65 m
HEIGHT TO TOP OF BONNET	1.99 m	1.99 m
HEIGHT TO TOP OF CABIN	2.94 m	2.96 m
OVERALL HEIGHT	3.71 m	3.71 m
TRACK WIDTH - REAR	1.69 m	1.8 m
TRACK WIDTH - FRONT	1.93 m	1.93 m
WIDTH OVER BUCKET	2.43 m	2.43 m
SIDE REACH TO CENTRE LINE OF MACHINE	6.04 m	6.04 m
TYRE OUTER TO OUTER	2.24 m	2.37 m

BACKHOE ATTACHMENTS

PRODUCT	HB640 BUCKET		
	SPECIFICATION		
DESCRIPTION	Width(w)(mm)	Volume(m ³)	No. of Teeth
22_BACHOE_BUCKET	620	0.22	4
26_BACHOE_BUCKET	758	0.26	5
TRENCH_BACKHOE_BUCKET	390	0.1	3

CAPACITIES

BL 85	
Oil flow, l/min(gpm)	60-90 (15.85-23.80)
Impact rate, bpm	530-1,000
Operating pressure, bar(psi)	120-150 (1,450-2,175)
Back pressure acceptance, bar(psi)	30 (435)
Maximum hydraulic input power, kw	23
Piston accumulator gas pressure(min, at operating temperature 60-70°C and maximum hydraulic input power), bar(psi)	12 (174)
Piston accumulator gas pressure(max(optimum), at operating temperature 60-70°C), bar(psi)	16.5 (239)
Pressure relief valve on carrier, bar(psi)	180 (2,610)

OPTIONS LIST

OPTION		
AIR SUSPENSION SEAT	With adjustable headrest and armrest , short back rest with electrical air suspension	
3 SIDE OPEN CABIN	Canopy and front windshield with wiper. 4 Front+4 Rear working lamps 3 side open ROPS / FOPS cabin. ROPS / FOPS meets ISO 3,471 and ISO 3,449	
SMOOTH RIDE CONTROL SYSTEM (SRS)	Operating range from 350-450 mm to 1,550-1,650 mm	
COLD START KIT (ONLY FOR PERKINS ENGINE)	WITHOUT GLOW PLUGS(-10°C WITH 15W40 OIL VISCOSITY) WITH GLOW PLUGS(-20°C WITH 10W OIL VISCOSITY)	
SIDE OPEN ENGINE BONNET	Engine bonnet opened	
CLOSED ENGINE BONNET	Without insulation	
CLOSED ENGINE BONNET WITH INSULATION	With polyethylene foam insulation. For very cold countries (some CIS countries) where ambient temperature remains less than - 5 for good period of year.	
CLOSED ENGINE BONNET WITH PERFORATED BONNET	With perforated meshed screen. For warmer condition markets and better appearance.	
DIFFERENTIAL LOCK PROVISION IN AXLE	Hydraulically actuated controlled by foot operated switch	
PILOT OPERATED BACKHOE JOYSTICKS		
MECHANICAL OPERATED BACKHOE JOYSTICKS		
BACKHOE OPERATION MECHANISM ISO +	One can choose either of the 3 options for backhoe operation. Available in pilot joystick as well as mechanical joystick.	
BACKHOE OPERATION MECHANISM SAE +		
BACKHOE OPERATION MECHANISM SAE CROSS		
FRONT WHEEL FENDERS (FRONT MUDGUARD)		
PRE CLEANER-Ejective	Protection from extreme dusty environment, used in middle east where machines operate in extreme dusty climate	
Front Tyre-400x70_20 (Suitable axle)	Ply rating 16 PR	
Rear tyre- 16.9x28-12PR	Ply rating 12 PR	
OIL SUITABLE FOR SUB ZERO TEMPERATURES	HVLP 32 GRADE (-40°C TO 60°C)	
BEACON LIGHT		
BACKHOE BUCKET	758 MM BACKHOE BUCKET WITH 5 NUMBERS OF TEETH-0.26 m ³	WIDTH-758 mm VOLUME-0.26 m ³ NO OF TEETH-5
	390 MM BACKHOE TRENCH BUCKET WITH 3 NUMBERS OF TEETH-0.1 m ³	WIDTH-390 mm VOLUME-0.1 m ³ NO OF TEETH-3
	EXTENDED TELESCOPIC DIPPER	Telescopic cylinder with an extended length of 1.1 meters
	ROCK BREAKER ATTACHMENT PROVISION - BREAKER LINE (RBA)	
	BULL ROCK BREAKER (BL85) EPIROC MAKE	Equivalent to Epiroc model EC 81 / LB 400. Impact rate=530-1,000 bpm Oil flow=60-90 lpm
	MECHANICAL QUICK HITCH ATTACHMENT (FOR BACKHOE)	Mechanically operated
LOADER BUCKET	6 IN 1 LOADER BUCKET	WIDTH-2,430 mm VOLUME-1.1 m ³ NO OF TEETH-8
	FORKLIFT	Lift capacity:1,200 Kg
	ROLL OVER FORKS ON GENERAL PURPOSE BUCKET	Lift capacity: 1,800 kg at a lifting height of 1.5 meters
	6 IN 1 LOADER BUCKET WITH ROLL OVER FORKS	WIDTH-2,430 mm VOLUME-1.1 m ³ NO OF TEETH-8 With roll over fork
	GRABBING FORK BUCKET	WIDTH-2,350 mm VOLUME-1.3 m ³ NO OF TEETH-8
	LOG FORK BUCKET	Fork max opening-1,120 mm
	SUGAR CANE GRABBER	Grabber max opening-1,400 mm
	HDHV (HIGH DUMP HIGH VOLUME BKT)	WIDTH-2,350 mm VOLUME-2.1 m ³ NO OF TEETH-8
	QUICK HITCH ATTACHMENT (BQRSL)	Mechanically operated
	CONCRETE MIXER ATTACHEMENT	Bucket capacity-600 litres

*Disclaimer: Certain functions may not be available depending on regional regulations and machine specifications. For more information, please contact your authorized Hyundai dealer.