

CASE
CONSTRUCTION

EX SERIES BACKHOE LOADER

770EX | 770EX MAGNUM | 851EX

EXPLORE



THE NEW
EX SERIES

EXPLORE THE FUTURE

THE RIGHT TOOL FOR
EVERY JOB APPLICATION

770^{EX}
MAGNUM

85



EXTRAORDINARY FUEL EFFICIENCY
THE EXPERT PRODUCTIVE PARTNER
EXCEPTIONAL ALL ROUND VISIBILITY AND COMFORT
EVERY NEED MET WITH THE RIGHT MODEL

51 EX

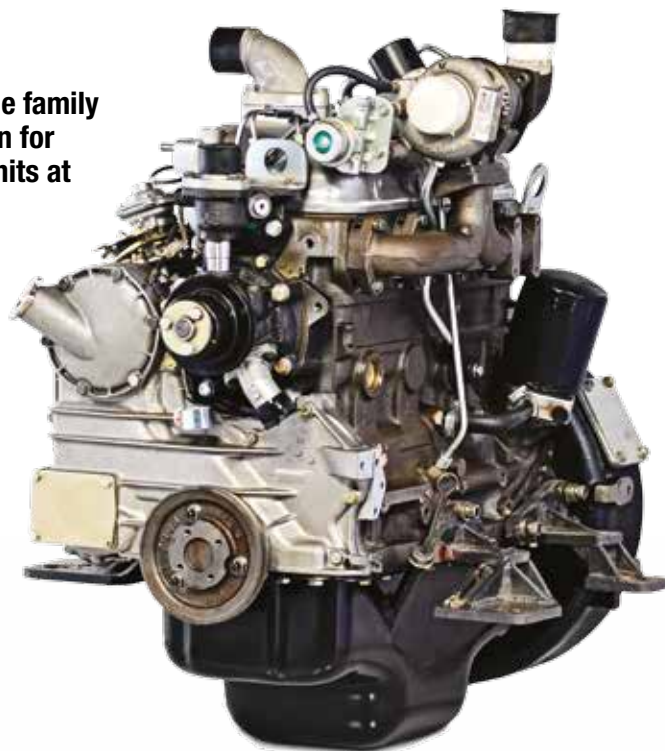
770 EX



AT THE HEART OF THE NEW EX SERIES

S8000: a world of applications. Since its launch the S8000 engine family has met with unequalled success. It has built a strong reputation for performance, economy and reliability with more than 600,000 units at work throughout the world in a wide variety of applications:

- ✓ **CONSTRUCTION AND MATERIAL HANDLING EQUIPMENT**
- ✓ **AGRICULTURAL EQUIPMENT**
- ✓ **COMMERCIAL VEHICLES**
- ✓ **GENERATORS**
- ✓ **IRRIGATION PUMPS**
- ✓ **MARINE APPLICATIONS**



A legacy of high performance

Case knows that power and performance are critical to the success of a machine. The new generation S8000 engine, developed by Fiat Powertrain Technologies Industrial (FPT Industrial), is a 3.9-liter 4 cylinders engine, turbo charged after cooled with a mechanical injection system. The S8000 provides outstanding performances such as faster response time and up to 10% better fuel economy. It is ARAI certified as BS3 thanks to its EGR technology.

The very first generation of the S8000 engine family was born in 1967. Launched as Series 800, it already showed the exceptional versatility that made it an extraordinary success. Since the first models entered production over 45 years ago, the S8000 engine family has undergone a continuous evolution, introducing a multiplicity of innovations to constantly increase power, performance and efficiency.



FPT Industrial: technological partner

Fiat Powertrain Industrial – known around the world as FPT Industrial – is one of the world's leading players in the development and production of engines, axles and transmissions for on-road, off-road, marine and power generation applications.

The 3 versions of S8000 engines for the 76 hp, 86 hp and 96 hp Case loader backhoes are manufactured on a dedicated state of-the-art fabrication and assembly line in Greater Noida, where advanced testing equipment puts every engine through rigorous quality checks at every key stage of production. Working closely with world leading components suppliers, we can guarantee that our engines are built to the highest quality standards, which ensure outstanding reliability and durability.



Serviceability

The EX Series has been designed to optimize serviceability. The tilting hood provides operators with fast and easy access to service points for daily maintenance.

Extraordinary fuel efficiency

The S8000 engine is equipped with a Charge Air Cooler to improve and optimize air induction. This solution provides outstanding fuel consumption during both production and travel, and especially on backhoe digging applications.

770^{EX}

FUEL CONSUMPTION	l/hr
Trenching	3.97
Truck Loading	4.23

Values can vary due to working conditions and operator skills



THE EXPERT PRODUCTIVE PARTNER

Backhoe

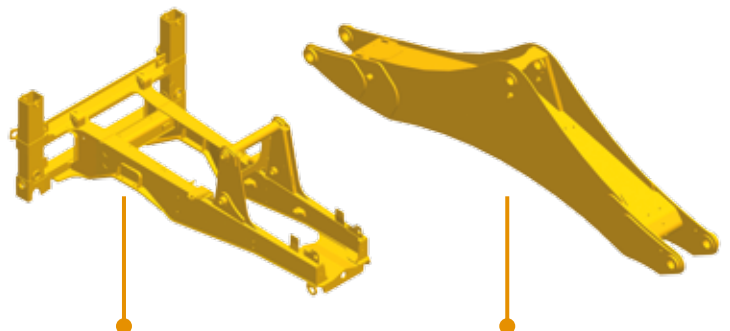
The shape of the backhoe enhances the loading ability of the machine and its capacity to overcome obstacles, while ensuring a high breakout force.

The new standard lifting hook will allow to handle suspended objects easily and safely.

The boom and dipper are built to guarantee durability and ultrasound inspection ensures the highest welding quality and reliability.



Large box-section structures with thick, multi-plate fabrications, castings, and forgings are used in high-stress areas such as the boom nose, boom foot, boom cylinder, and stick foot to improve durability.



The robotically welded two-piece structural frame design provides a rugged and reliable foundation for the machine that improves stability, performance, and serviceability.

Loader

CASE engineers used an innovative systems integration approach to design and improve loader arm design to meet customer needs in loading applications. The straight loader arm design with optimized line routings provides excellent visibility, enabling operators to work with maximum comfort.



Axles

The axles are designed to handle extreme applications resulting in reliable performance and extended life. The new 2-cylinder steering front axle is mounted above the center pivot and can oscillate to ± 13 degrees, so that all four wheels stay on the ground ensuring great stability even on the roughest terrains.



Transmission

The power shuttle transmission provides four speeds forward and reverse. Hydraulically shifted clutches allow on-the-go direction and travel speed shifts. Control valves deliver smooth speed and directional shifts.

4WD option improves mobility and loader performance where job site conditions are muddy and extra traction is mandatory.



EXCEPTIONAL ALL ROUND VISIBILITY AND COMFORT

The seat

The mechanical suspended seat increases operator comfort with a cushioned upper high back. It is fully adjustable to provide the optimal driving position.

Buddy seat

The full size, fully cushioned helper seat provides a secure and comfortable ride.

A comfortable operator is a confident and productive one

The EX Series features, the largest cab in the industry, offering a comfortable working space for both the operator and a possible helper. All EX Series backhoe loaders share the same spacious and ergonomic cab design.

Enter the cab to see and feel how the EX Series cab sets a new benchmark in operator comfort. Visibility is excellent to the rear and to the bucket edge. The large size glazed windows and narrow cab columns put you in command with clear, all-round visibility. The very good view to the attachment and corners improves comfort and jobsite safety, for greater productivity.

This spacious cab has redesigned ergonomics to offer better operator comfort. All the controls have been specially positioned to offer easy access and faster control. The large window improves air ventilation in the cab and facilitates communication to the back of the machine. The cabin has a large buddy seat along with storage compartments, mobile charger, document holder, bottle holder and radio.



Visibility

The 6 post cab with plenty of floor to ceiling windows provides excellent visibility to improve both operator performance and jobsite safety.



Controls

The ergonomic layout of operator controls enhances operator comfort and productivity. Easy access to the cab with ergonomically placed grab rails, walk-up steps and large platform.

EX SERIES BACKHOE LOADER

770EX | 770EX MAGNUM | 851EX

Specifications

	770EX	770EX MAGNUM	851EX
ENGINE			
Engine model code	8040.45		
Type	TCA		
Bore	104 mm		
Stroke	115 mm		
Displacement	3.9 l		
Compression ratio	18.3:1		
Horsepower - rated at 2200 RPM	76 hp	86 hp	96 hp
Maximum torque at 1300 RPM	332 Nm	402 Nm	420 Nm
Engine speeds			
Rated speed, full load	2200		
Low idle speed (at no load)	950		
POWER TRAIN			
Transmission - Standard			
Model	CARRARO 2WD TLB1		
Type	Power Shuttle with 4 forward and 4 reverse travel gears		
Gear	Forward (speed kmph)	Reverse (speed kmph)	
1st	6.2	7.4	
2nd	10	12	
3rd	20.7	Not Recom.	
4th	39.2	Not Recom.	
Transmission - Optional			
Model	CARRARO 4WD TLB1		
Type	Power Shuttle with 4 forward and 4 reverse travel speeds		
Gear	Forward (speed kmph)	Reverse (speed kmph)	
1st	6.2	7.4	
2nd	10	12	
3rd	20.7	Not Recom.	
4th	39.2	Not Recom.	
Front axle			
2 Wheel Drive (Standard)			
Model	CNH PS1300		
Type	Steering		
4 Wheel Drive (Optional)			
Model	Carraro 26.17		
Type	Steering		
Rear axle			
Make & Model	CARRARO 28.32M		
Type	Rigid		
Brakes			
Service Brakes			
Type	Wet multi-discs		
No. of discs	6		
Parking Brakes			
Type	Manual, with lever		

770EX

770EX MAGNUM

851EX

TYRE SIZE**Recommended**

Standard - Front	9.0x16 - 16 PR
Standard - Rear	16.9x28 - 12 PR
Heavyduty - Front	12.5x18 - 12 PR
Heavyduty - rear	14x25 - 20 PR

HYDRAULIC SYSTEM

Type	Gear pump		
Flow rate	123 lpm @2200 RPM	123 lpm @2200 RPM	151 lpm @2200 RPM
Pressure	190 Bar	210 Bar	210 Bar

STEERING

Type	Power Steering
System pressure	140 Bar
Displacement	125 cc

Turning radius (Outside of the Bucket)

With Brake	4600 mm
Without Brake	5550 mm

Tread width

Front	1884 mm
Rear	1697 mm

Buckets**Loader buckets**

Type	Standard
Heaped capacity (SAE capacity)	1.0 Cum.
Width	2277 mm
Weight	400 kg

Backhoe buckets

Heaped capacity (SAE capacity)	0.26 Cum.
Width	762 mm
Weight	240 kg

Optional buckets

	Capacity (SAE l)
Loader HD	630
Loader HD	760
Loader GP	900
Loader GP	1000
Loader coal handling	1200
Loader Garbage handling (without teeth)	1500
Bull Clam	1000
Backhoe Trenching	80
Backhoe Trenching	120
Backhoe Trenching	180
Backhoe Trenching	260
Backhoe Trapezoidal	300
Ditch Cleaning (without teeth)	300

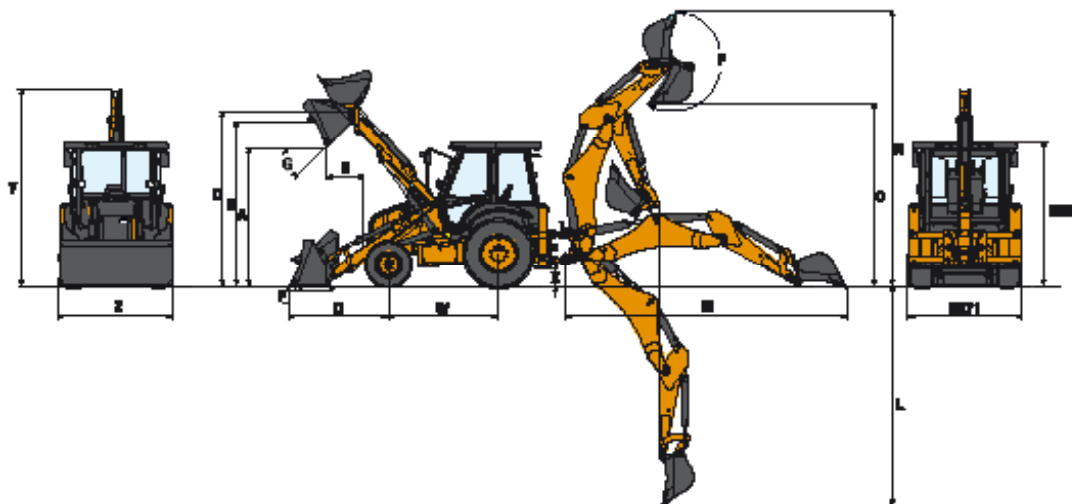
Service capacities

Engine Oil	11 Ltr
Transmission Oil	16 Ltr
Rear Axle Oil	18 Ltr
Hydraulic Oil	130 Ltr
Fuel Tank	142 Ltr
Coolant	20 Ltr

EX SERIES BACKHOE LOADER

770EX | 770EX MAGNUM | 851EX

General Dimensions Standard Dipper



LOADER		770EX	770EX MAGNUM	851EX
A	Dump height	mm	2732	
B	Load over height	mm	3275	
C	Hinge pin height	mm	3478	
D	Reach at ground	mm	1980	
E	Reach at full height-bucket dumped	mm	751	
F	Below ground level-dig depth	mm	106	
G	Dump angle	°	45	
	Loader bucket breakout force	kgf	5720	6570
	Bucket capacity	Cum.	1.0	
	Pay load	kg	1760	1900
	Maximum lifting capacity @ max height	kg	3425	3700
BACKHOE				
L	Max.dig depth	mm	4363	
M	Reach ground level to swing center	mm	5574	
N	Max working height	mm	5455	
O	Max load over height	mm	3636	
P	Bucket rotation	°	204	
	Bucket breakout force	kgf	5000	5630
	Dipper digging force	kgf	3725	4300
	Loading reach	mm	2232	2232
	Safe working load @ 3.2 mtr radius	kg	1000	1100

BOTTOM DUMP BUCKET

This multipurpose bucket is ideal for digging, loading, dozing, backfilling, grading and grab operation.

Bucket width Outside	mm	2265
Width of dozer blade	mm	2280
Maximum Clamp Opening	mm	977
Bucket capacity (SAE HEAPED)	Cu.m	1.0
Dump height	mm	2710

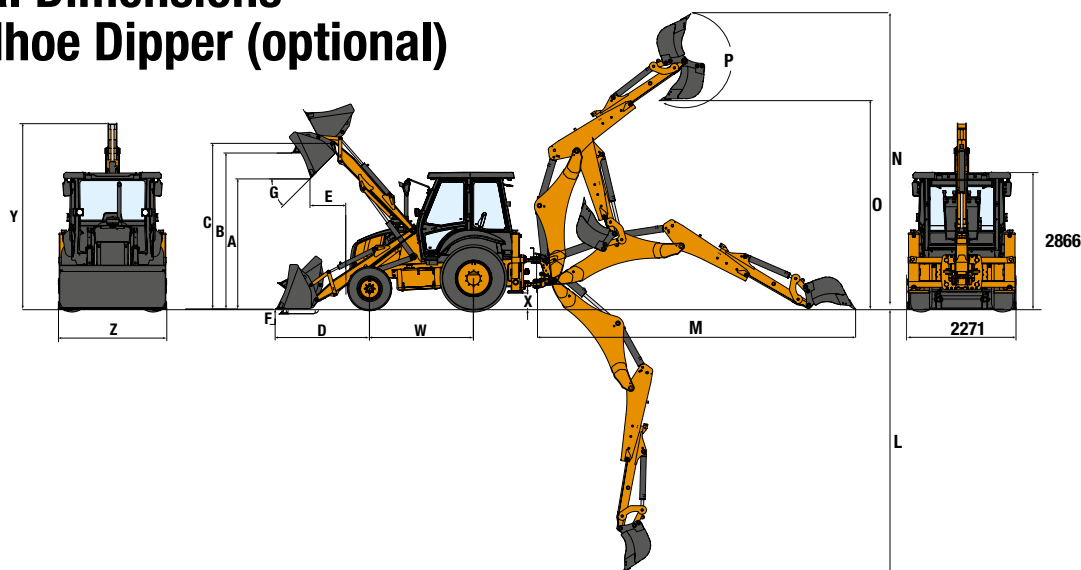
OVERALL DIMENSIONS AND WEIGHTS

Overall operating weight *	kgs	7710
W Wheel base	mm	2181
X Minimum ground clearance	mm	399
Y Overall height (Transport)	mm	3901
Z Width over bucket (Transport)	mm	2277

* Operating weight with 1 Cum loader bucket and 0.26 Cum backhoe bucket, standard dipper, 80 Kg operator and full fuel tank.

General Dimensions

Extendhoe Dipper (optional)



LOADER		770EX	770EX MAGNUM	851EX
A	Dump height	mm	2732	
B	Load over height	mm	3275	
C	Hinge pin height	mm	3478	
D	Reach at ground	mm	1980	
E	Reach at full height-bucket dumped	mm	751	
F	Below ground level-dig depth	mm	106	
G	Dump angle	°	45	
	Loader bucket breakout force	kgf	5720	6570
	Bucket capacity	Cum.	1.0	
	Pay load	kg	1760	1900
	Maximum lifting capacity @ max height	kg	3425	3700
BACKHOE				
L	Max.dig depth	mm	5583	
M	Reach ground level to swing center	mm	6695	
N	Max working height	mm	6195	
O	Max load over height	mm	4376	
P	Bucket rotation	°	204	
	Bucket breakout force	kgf	5000	5630
	Dipper digging force	kgf	3725	4300
	Loading reach	mm	2232	2232
	Safe working load @ 3.2 mtr radius	kg	1000	1100

Standard equipment

a) Instrumentation:

- Speedometer
- RPM meter
- digital hour counter
- fuel level indicator
- Engine coolant temperature gauge
- Switches for operating the working lamps, cabin fan, declutch,& hazard lamps

b) Electrical & Lights

- 2 Head lights in front with Parking lights & direction indications
- Cabin lamps
- Fan
- 2 rear working lamps for backhoe operation
- Spacious battery box on RH side for easy access and maintenance

Optional equipment

- 4-Wheel Drive (4x4 Traction)
- Rockbreaker
- Lifting arrangement
- Extending type dipper
- 1.1 Cum and 1.2 Cum loader bucket with teeth
- Bottom dump bucket
- Ripper Tooth
- Backfill blade
- Heavy duty tyres -14X25 - 20 PR
- Dozer blade
- Lime Stone scraper
- Wood log grapple

EX SERIES BACKHOE LOADER

770EX | 770EX MAGNUM | 851EX







Parts and Service

Wide network of customer support across India.

In India, Case equipment are sold and serviced by more than 60 dealers at more than 180 touch points to serve the needs of our customers. No matter where you work, we're here to support and protect your investment and exceed your expectations. You can count on Case and your Case dealer for full-service solutions-productive equipment, expert advice, flexible financing, genuine Case parts and fast service. We're here to provide you with the ultimate ownership experience.

To locate a Case dealer or learn more about Case equipment or customer service, go to www.casece.com/en_in



NOTE: CASE provides specific outfits for various countries and many optional fittings (OPT). The illustrations on this or other leaflets may relate to standard or optional fittings. Please consult your CASE dealer for any information in this regard and any possible updating on components. CNH Industrial reserves the right to modify machine specifications without incurring any obligation relating to such changes.

CASE NEW HOLLAND CONSTRUCTION EQUIPMENT (INDIA) PRIVATE LIMITED REGISTERED OFFICE:
Unit No. 219, Atlanta Estate, A-Wing, Near Virwani Industrial Estate, Dr. Ambedkar Chowk, Off Western Express Highway, Goregaon (E), Mumbai - 400 063 - Email: caseindia@cnhind.com, www.casece.com

CASE Construction Equipment is a brand of CNH Industrial N.V., a World leader in Capital Goods listed on the New York Stock Exchange (NYSE: CNHI) and on the Mercato Telematico Azionario of the Borsa Italiana (MI: CNHI). More information about CNH Industrial can be found online at www.cnhindustrial.com.

Specifications subject to change without notice due to product upgradation.

