

# 306

## Mini Hydraulic Excavator



### Engine

Net power 37.6 kW

### Weights

Operating weight 5775 kg

## 306 Features

### Comfortable Cab

*Spacious cab with ergonomic low effort controls and suspension seat keeps you comfortable all day.*

### Performance

*0.22 m<sup>3</sup> Heavy-Duty bucket is standard. High bucket and stick forces with fast, smooth hydraulics ensure optimum performance to maximize your production.*

### Durability

*Heavy-Duty boom, stick and bucket. Stronger robust undercarriage is built for stability, durability and low maintenance.*

### Versatility

*Optional auxiliary hydraulic lines provide full machine utilization for increased machine versatility.*

### Serviceability

*Fast, simple and convenient maintenance reduces machine downtime.*



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**The Cat<sup>®</sup> 306 Mini Hydraulic Excavator has been designed and built by Caterpillar to deliver exceptional performance, productivity, controllability and reliability at the lowest cost. To support your work, the Cat dealer network provides world-class after sales support.**

# Operator Station

Simple, easy operation allows the operator to focus on production.

## Ease of Operation

Low effort, ergonomically designed pilot hydraulic levers provide full controllability. All controls are pilot hydraulic operated, including front linkage, travel, dozer and auxiliary. Maximum travel speed can be selected by easily accessible foot switch on the cab floor. The integrated monitor reports vehicle information accurately.

## Quiet and Comfortable Operator Station

The spacious cab provides a comfortable working environment for the operator.

- Low operator and spectator sound levels
- Cab includes heater and air conditioner for maximum comfort in a range of climatic conditions
- Fully adjustable, reclining fabric suspension seat with headrest for greater comfort
- Flat floor allows easy sweep out
- Radio ready with two speakers and an antenna (optional 12V AM/FM radio)

## Excellent Visibility

The 306 features excellent visibility to the work tool and machine surroundings.

- Assisted front window opens easily
- Removable lower front window
- Front window wiper and washer for a clear view
- Dozer blade is visible from all swing angles for maximum convenience



# Performance

Powerful digging with precise control.



## Hydraulics

The highly efficient hydraulic system has been designed for improved controllability, reliability and low operating costs. The hydraulic system is an open-center two-pump system with one independent third pump. Two main hydraulic pumps have a flow control system that reduces flow to a minimum when the joysticks and travel controls are in the neutral position. This reduces fuel consumption and sound levels and extends component life. Auxiliary lines enable the operation of a variety of work tools including hydraulic hammers, augers, shears and crushers.

## Stick and Boom

The front structure is designed to provide maximum digging capability using high tensile strength steel. All pins used in the front linkages have thick chrome plating to prevent pin galling and squealing for long pin and stick life. The diameter of each pin is made as large as possible to smoothly distribute the shear and side loads associated with the stick during tough digging jobs. The pin and low maintenance bushing arrangement reduces pin friction, extending the greasing interval.

# Undercarriage

Lower structure supports high production.



## Steel Track

Caterpillar designed undercarriage is built for stability and durability. A 400 mm triple grouser track is standard. Lower profiled undercarriage provides better stability and lifting capability. Travel motors with two-speed capability and strong track drives provide high gradeability and turnability for various ground conditions. Split master link and sealed track rollers reduce owning and operating costs. Steel tracks provide optimum stability when lifting over the side.

## Rubber Pads

The 400 mm wide shoe has four holes that attach rubber pads to the track. This option will prevent damage to paved road surfaces, minimizing noise and vibration during travel with a standard steel track system.

## Blade

The dozer blade is an important tool used for backfilling trenches, leveling, landscaping, lifting and job site cleanup. Large capacity blade provides better stability and easier grading performance with its unique floating position in the control lever stroke. The blade has been extended for greater stability while digging and increased departure angle for truck loading and unloading.



# Engine

Clean, quiet and efficient.

High displacement Mitsubishi Motors Corporation 4M40 engine offers long life and improved thermal efficiency with low fuel consumption and reduced engine sound levels and vibration. Engine meets EPA Tier 2 and EU Stage II gaseous emission regulations as well as Beijing local standard DB11/185-2003 and DB11/184-2003, China national standard GB17691-2001 and Korea National Institute of Environment Regulation. Standard glow plug provides reliable engine starting capability in lower temperatures. High ambient capability is secured even when the air conditioning is working.



# Serviceability and Customer Support

Simplified service and maintenance save you time and money.



## Easy Service

Fast, easy service with extended service intervals, convenient filter access and user-friendly electronic diagnostics increases productivity and reduces maintenance costs:

- Tilt-up, wide engine enclosure for easy access to all major components and service points
- All grease fittings can be easily reached
- Daily maintenance points accessible from ground level
- Precleaner for extended engine air filter life
- Radial seal air filter provides easier maintenance
- Efficient, large fuel filter and water separator
- Maintenance free Cat batteries are standard
- Fuel refueling pump with auto shut-off is standard
- Low maintenance bushings extend greasing intervals to 500 hours on blade and front linkage joints

## Superior Dealer Service

Your Cat dealer is ready to assist you with your purchase decision and everything after. They offer a wide range of services to help you get the job done.

## Safety

Job site safety is critical.

The 306 has been designed with operator safety in mind with features including:

- Safety interlock system with neutral engine starting
- Laminated front window shield
- Breakable rear window for escape
- Handrail and anti-slip step



# 306 Mini Hydraulic Excavator Specifications

## Engine

Engine model	4M40
Net power	37.6 kW
Bore	95 mm
Stroke	100 mm
Displacement	2.84 L

- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator
- No engine power derating required below 1500 mm altitude
- Net power rating per ISO 9249, SAE J1349 and EEC 80/1269

## Weights

Operating weight	5775 kg
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- Weight with cab, 3 m boom, 1.6 m stick, 0.22 m<sup>3</sup> bucket (766 mm width) and 400 mm shoes

## Hydraulic System

Digging forces – stick (standard)	25.5 kN
Digging force – bucket	38.6 kN
Main system – maximum flow	152 L/min
Maximum pressure – implements	24 500 kPa
Pilot system – maximum flow	18.7 L/min
Pilot system – maximum pressure	3400 kPa

## Swing System

Machine swing speed	8.8 rpm
Swing torque	12.3 kN·m

## Blade

Width	1950 mm
Height	340 mm

## Service Refill Capacities

Cooling system	15.5 L
Engine oil	11.2 L
Fuel tank	135 L
Hydraulic tank	57 L
Hydraulic system	85 L

## Drive

Travel speed	4.8 km/h
Maximum drawbar pull	48.2 kN

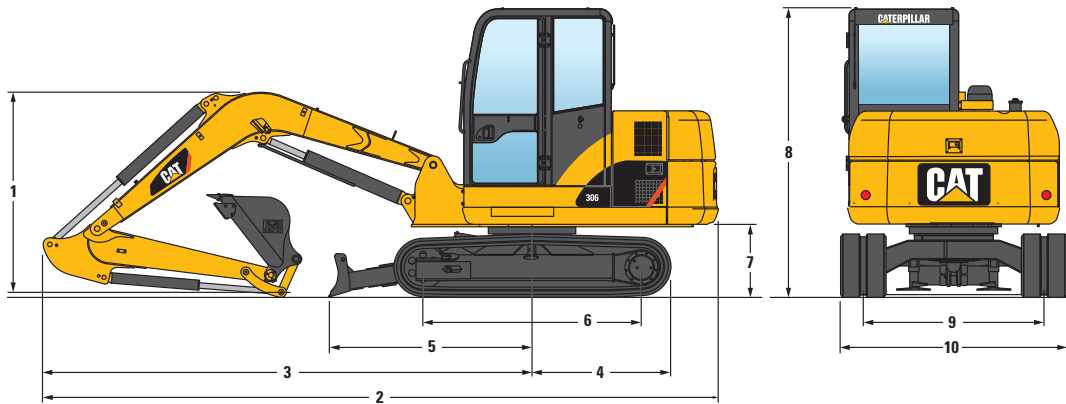
## Track

Track shoe width (standard)	400 mm
Track length	2500 mm
Number of shoes (each side)	38
Number of track rollers (each side)	5
Number of carrier rollers (each side)	1

- Track shoe has 4 holes for pad shoe adoption

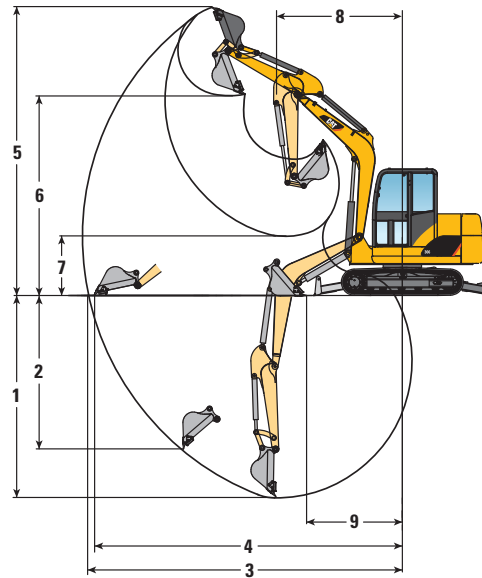
# 306 Mini Hydraulic Excavator Specifications

## Dimensions



- 1 1760 mm
- 2 5925 mm
- 3 4290 mm
- 4 1220 mm
- 5 1820 mm
- 6 1920 mm
- 7 640 mm
- 8 2545 mm
- 9 1550 mm
- 10 1950 mm

## Working Range



- 1.6 m Stick**
- 1 3780 mm
  - 2 3030 mm
  - 3 6110 mm
  - 4 5980 mm
  - 5 5530 mm
  - 6 3890 mm
  - 7 1470 mm
  - 8 2720 mm
  - 9 1990 mm

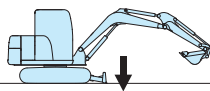
## Lift Capacity



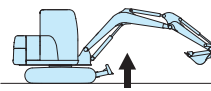
ISO 10567  
SAE J1097



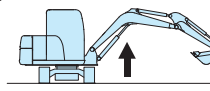
A



B



C



		2 m			3 m			4 m			Max			Radius
		A	B	C	A	B	C	A	B	C	A	B	C	
4 m	kg							*900	*900	*900	*950	*950	*950	4.5 m
3 m	kg							*950	*950	*950	*950	*950	800	5.1 m
2 m	kg				*1650	*1650	*1650	*1200	*1200	*1200	*950	750	700	5.5 m
1 m	kg				*2400	1900	1650	*1500	1200	1100	*1000	750	650	5.6 m
0 m	kg	*1150	*1150	*1150	*2600	1850	1600	*1700	1200	1050	*1100	750	700	5.4 m
-1 m	kg	*2400	*2400	*2400	*2400	1850	1600	*1650	1150	1050	*1150	850	750	5.0 m
-2 m	kg	*3000	*3000	*3000	*2000	*2000	1650	*1350	*1350	1050	*1200	*1200	950	4.3 m

Lifting capacities were calculated with a machine equipped with a 0.22 m<sup>3</sup> capacity standard bucket. The difference between the weight of a work tool attachment and the standard bucket must be subtracted.



## 306 Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

One piece boom  
Standard stick – 1.6 m  
766 mm width, 0.22 m<sup>3</sup> capacity bucket with 5 tips  
Bucket side cutters  
Radial seal air filter  
Water separator in fuel line  
Auxiliary hydraulic valves (two)  
Two speed travel  
Air conditioner  
Light, storage box mounted (one)  
Cat one key security system  
Door locks and cap locks

Signaling/warning horn  
Boom drift reducing valve  
Automatic swing parking brake  
Counterweight, 510 kg  
Cat maintenance free batteries  
Openable front windshield  
Windshield wiper and washer  
Removable lower windshield  
Interior lighting  
Cup holder  
Storage pocket  
Ashtray

Radio mounting (meet DIN size)  
Two stereo speakers and antenna  
Washable floor mat  
Working hour meter  
Fabric suspension seat with headrest  
Seat belt, 50 mm width  
Blade with floating position  
Towing eye on baseframe  
Shoes, 400 mm triple grouser track shoe with holes (for rubber pad fit)  
Electric re-fueling pump  
Accumulator  
GPS ready

## 306 Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

Cab mounted light  
Hand control pattern changer (two way)  
AM/FM radio

Rearview mirror  
Auxiliary hydraulic lines  
Heavy-duty swivel guard

Quick coupler (manual)  
Shoes, 400 mm triple grouser track shoe with rubber pad



# Notes





## 306 Mini Hydraulic Excavator

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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