

CASE

CONSTRUCTION

HYDRAULIC EXCAVATOR **CX180B**



Engine Horsepower	89.2 kW - 120 hp
Operating weight (max)	17.9 t
Bucket capacity	0.27 m ³ to 0.95 m ³

P R O F E S S I O N A L P A R T N E R

POWERFUL PERFORMER

Advanced hydraulic system offers three working modes to perfectly match power and speed to every application, reducing fuel consumption while maximising performance. Auto mode and Super Power mode provide increased digging forces, slew speeds and high swing torque resulting in reduced cycle times and increased productivity.

Tier III common rail fuel injection technology increases fuel efficiency and engine output, reducing operating costs and improving cost per tonne performance. Advanced hydraulic system contributes to significant fuel savings, boosting profitability.

Lower operating cost. Higher production.



INNOVATIVE DESIGN

Robust, strong appearance promotes operator acceptance and confidence. Advanced cab structure provides exceptional levels of comfort for all operators. Common rail engine has exhaust gas recirculation to ensure low emissions.

Combined with simple and effective hydraulic mode selection system, results in high productivity with low fuel use.

Better for your company and better for the environment

Environmental awareness. Operator satisfaction.

SAFETY AND SECURITY

New cab has greater glass area for improved visibility all round, yet structure is three times more rigid than a conventional frame, increasing safety for the operator. Single piece side window ensures an excellent view to the right side of the machine. Easy to use operating console, smooth responsive controls and comfortable seating reduce operator fatigue, to boost productivity and site safety.

Enhanced visibility. Ease of use.

CAB COMFORT

Cab design offers additional leg and foot space, making it easier for the operator to get comfortable. An increase in glass contributes to the spacious feeling. Fully reclining seat and air conditioning with multiple vents promotes comfort and low fatigue throughout the day. Hot/cold storage box, cup holder, mobile phone pocket and large box behind the operator's seat.

Viscous cab mountings reduce vibration and noise within the cab. Both servo consoles have four positions with auto return to selected position on left hand side. Combined with intuitive controls, ensure that the operator is always in total control.

Low fatigue. High productivity.

DESIGNED TO PERFORM

All Case excavators have reliability and durability built in. Strong upper structure and revised boom and dipper design with forged brackets ensure long service life with low maintenance. Redesigned undercarriage components built to out perform the competition, keeping your equipment working efficiently.

EMS bushes increase durability, lowering operating costs. A high performance synthetic fibre hydraulic filter is employed to protect the entire hydraulic system. There is now no need for separate filters when the machine is used with a hydraulic breaker.

Durability built in. Maximum service life.



REDUCED OWNERSHIP COST

The Case CX180B has a larger fuel tank complete with high flow auto-stop refuelling pump, reducing downtime for refuelling and ensuring that there is no fuel spillage onto sensitive ground. With low consumption common rail engine, and advanced hydraulic system, this allows up to two days working between fuel stops, increasing productivity and reducing operating cost. Extended Maintenance System (EMS) bushes provide 1,000 hour greasing intervals on the majority of pins, while low friction side shims on boom and dipper further reduce maintenance. Easy to clean side by side coolers and ground level access to centralised filter bank cut service time, boosting profitable uptime.

Longer working. Higher profitability.

ENGINE



Electronically-controlled common rail engine exceeds Tier III emissions regulations and is designed for the future. Robust design and fuel cooler boost durability for all components, ensuring long service life. Low engine speed, large capacity fan and low sound type exhaust system offer lower noise levels. Four valve per cylinder engine design, using advanced exhaust gas recirculation (EGR) reduces harmful emissions. Auto and one-touch idle speed allows the operator to control the engine for maximum efficiency at all times. Higher output with lower fuel consumption, contributes to boost in productivity for the customer.

HYDRAULICS



Case has been manufacturing class-leading excavators for many years, and the CX180B builds on that success. The machine is equipped with highly efficient piston pumps with improved tolerances for improved economy. A variable control pump torque system perfectly matches engine output to hydraulic demand, ensuring high productivity and rapid reaction to servo lever movement. A Super Fine synthetic fibre hydraulic filter provides a high contamination catch, protecting valuable components and prolonging hydraulic oil service life. There is now no need for additional filters to be used when operating a breaker, cutting cost for the customer.

New hose burst control valves are now located behind the boom cylinders for greater protection and improved visibility.

CONSOLE ENGINE THROTTLE



The four position adjustable right hand console includes an advanced engine throttle control, which controls mode selection for the hydraulic system. All switches are grouped in a central layout and short servo lever joysticks make the CX180B a simple machine to operate. A luminosity sensor in the display console ensures that the graphics are clear and easy to read whatever the light conditions. The advanced hydraulic system allows up to 10 auxiliary hydraulic flow settings into the machine's memory, making it possible to use up to 10 attachments with no manual adjustment to the machine, increasing productivity and cutting downtime for attachment fitting.

OPERATOR'S CAB

The CX180B cab has slim pillars and more glass than its predecessor, including a single piece window on the right hand side of the operator offering improved visibility all round the machine. The main windscreen has a retractable sun visor and can be lifted into the roof space for a clear view of the digging area. Despite the thin pillars the cab is three times more rigid for increased safety and combined with viscous cab mounts results in best in class low levels of noise and vibration. Adjustable consoles, longer seat slides, increase in foot space, a fully reclining seat and air conditioning with nine outlet vents ensure that the operator stays comfortable and productive throughout the day.

The cab specification is high, with a clock, a large storage box behind the driver's seat, bottle and can holders, a mobile phone holder and a cool box that uses the air conditioning system to regulate internal temperature.



MAINTENANCE



All filters are remote mounted in a central position with large doors, providing ground level access for maintenance and reducing service times. The Case CXB excavators achieve the lowest possible score with the SAE Maintenance score system, reducing downtime and service cost. The fuel tank has both a drain cock and a removable service plate, to allow for easy cleaning in the case of fuel contamination. A green engine oil drainer helps reduce environmental impact completely cutting out the risk of spillage during draining. The high-flow electric refuelling pump is twice as fast as previous models and the auto-stop function makes refilling easier. However the larger tank and reduced fuel consumption offer longer running between fills. Centralised greasing systems are available as an option on the CX180B.

UNDERCARRIAGE



Case undercarriage design provides long component life and low operating costs. The CX180B has specially heat treated drive sprockets for extended reliability. Robust track guides and improved track links, with new M shaped seals and increased pin hardness, further boost durability and reduce track wear. The track rollers have an O-ring design that prevents the ingress of abrasive material and a revised profile for lower wear, further extending component life and lowering ownership costs.

IMPROVED PIN AND BUSHING LIFE



EMS chrome plated pins with brass bushing



Antifriction shims

Extended Maintenance Bushings (EMS) are fitted as standard on all CXB excavators. The low maintenance bushings provide 1,000 hour greasing intervals, greatly reducing daily and weekly servicing for the operator. Anti-friction shims in the boom foot and head reduce noise and cut free play, further increasing the Case reputation for durability and increasing operator satisfaction on site.

ATTACHMENTS/**BUCKETS**

CX180B customers can choose from a variety of main booms and dipper arms to suit different applications, all of which are constructed of heavy duty steel box section with internal baffles to increase torsional rigidity. Deep groove welding ensures that the booms and arms can withstand the stress of high breakout forces, heavy lifting and attachments such as hydraulic breakers, compactors, demolition shears and crushers.

With a different choice of booms and dipper sticks, along with a range of buckets from 0.27m³- 0.95 m³, there is a configuration to meet the requirements of every customer's job site.







SPECIFICATIONS

ENGINE

Latest generation engine, meeting European requirements for "Low exhaust emissions" Tier III in accordance with directive 97/68/EC
 Make _____ ISUZU
 Type _____ AI-4JJ1X
 Common rail, turbo, intercooler, fuel cooler GR (Exhaust Gas Recirculator) _____ Yes
 Direct injection _____ Electronically controlled
 Number of cylinders _____ 4
 Bore - Stroke _____ 95.4 x 104.9 mm
 Cubic capacity _____ 3000cc
 Horsepower EEC80/1269 ____ 89.2kW/120hp @ 2200 rpm
 Maximum Torque _____ 391 Nm @ 1800 rpm

HYDRAULIC SYSTEM

Max output _____ 2 x 142 l/min @ 2200rpm
 2 axial piston, variable flow pumps _____ Yes
 Attachment/Power Boost _____ 343/363 bar
 Upperstructure swing _____ 279 bar
 Travel _____ 343 bar
 Oil filtration _____ 6 micron
 Type of oil filter _____ Synthetic fiber Super fine High catch

SWING

Max upperstructure swing speed _____ 11.5 rpm
 Swing torque _____ 4510 daN

TRAVEL

The travel circuit is equipped with axial piston, variable flow motors
 Max travel speed _____ 4 km/h
 Low travel speed _____ 2.3 km/h
 Speed change is controlled from the instrument panel
 Automatic downshifting _____ yes
 Gradeability _____ 70% (35°)
 Tractive force _____ 19 000 daN

ELECTRICAL SYSTEM

Circuit _____ 24V
 Batteries _____ 2 x 12V - 72A/h
 Circuit equipped with water-proof connectors _____ Yes
 Alternator _____ 24V - 50Amp

UNDERCARRIAGE

Upper rollers _____ 2
 Lower rollers _____ 7
 Number of track pads _____ 46
 Type of shoes _____ Triple grouser
 Track pad width Standard _____ 600 mm
 Track guard _____ Front and 1 central

CIRCUIT AND COMPONENT CAPACITIES

Fuel tank _____ 300 l
 Hydraulic reservoir _____ 90 l
 Hydraulic system _____ 165 l
 Travel reduction gear (per side) _____ 4.5 l
 Swing reduction gear _____ 5 l
 Engine oil (including filter change) _____ 17 l
 Engine cooling system _____ 15 l

BUCKETS

GENERAL PURPOSE

SAE capacity	l	270	390	570	660	750	850	950
Width	mm	500	600	800	900	1000	1100	1200
Weight	kg	350	385	455	495	525	550	590

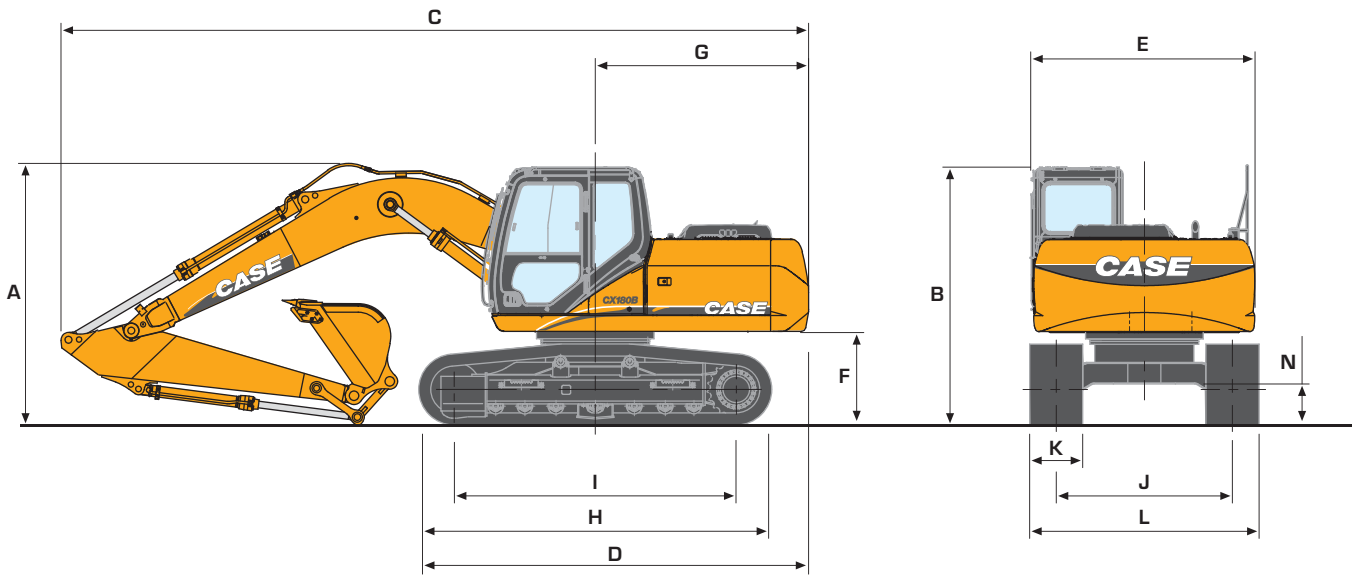
HEAVY DUTY

SAE capacity	l	660	750	850	950
Width	mm	900	1000	1100	1200
Weight	kg	555	590	625	665

* For other bucket sizes, please contact your CASE dealer

GENERAL DIMENSIONS

WITH 5.15 m STANDARD MONOBOOM



		CX180B Mono		
		2.23	2.62	3.05
DIPPER LENGTH				
A Overall height (with attachment)	m	3.00	2.96	3.12
B Height (cab/handrail)	m	2.94/2.96	2.94/2.96	2.94/2.96
C Overall length (with attachment)	m	8.49	8.44	8.52
D Overall length (without attachment)	m	4.50	4.50	4.50
E Width of upperstructure	m	2.54	2.54	2.54
F Upperstructure ground clearance	m	1.04	1.04	1.04
G Swing radius (rear end)	m	2.41	2.41	2.41
H Track overall length	m	4.18	4.18	4.18
I Centre idler to centre sprocket	m	3.37	3.37	3.37
J Track gauge	m	2.20	2.20	2.20
K Track shoe width standard	mm	600	600	600
L Track overall width - 600 mm shoes	m	2.80	2.80	2.80
- 700 mm shoes	m	2.90	2.90	2.90
- 800 mm shoes	m	3.00	3.00	3.00
N Ground clearance	m	0.46	0.46	0.46

WEIGHT AND GROUND PRESSURE

With 5.15 m standard monoboomb 2.62 m dipper - 521 kg, 0.68 m³ bucket, operator and full fuel tank

	WEIGHT (kg)	GROUND PRESSURE (bar)
shoes 600 mm steel	17 900	0.40
shoes 700 mm steel	18 300	0.35
shoes 800 mm steel	18 600	0.31

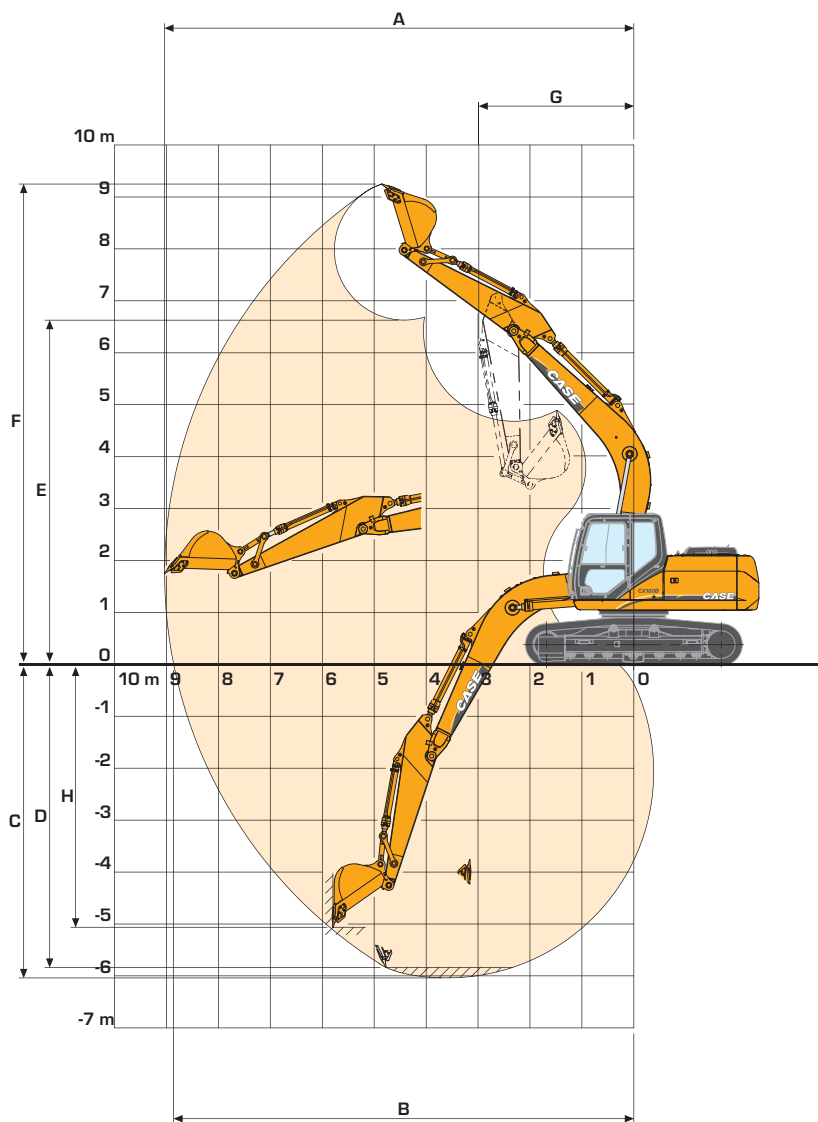






PERFORMANCE DATA

WITH 5.15 m STANDARD MONOBOOM



DIPPER LENGTH

2.23 2.62 3.05



A Maximum digging reach	m	8.67	9.04	9.38
B Maximum digging reach at ground level	m	8.49	8.87	9.21
C Maximum digging depth	m	5.65	6.04	6.47
D Digging depth - 2,44 m level bottom	m	5.42	5.84	6.28
E Max dump height	m	6.40	6.62	6.71
F Overall reach height	m	9.02	9.25	9.30
G Minimum swing radius - attachment	m	2.98	2.99	2.98
H Vertical straight wall dig depth	m	4.70	5.07	5.21
Digging force	daN	9000	7900	7200
- w/o Power Boost	daN	9500	8400	7700
- with Power Boost	daN	11 200	11 200	11 200
Breakout force	daN	11 800	11 800	11 800
- w/o Power Boost	daN	11 800	11 800	11 800
- with Power Boost	daN	11 800	11 800	11 800

CX180B

LIFTING CAPACITY

WITH 5.15 m STANDARD BOOM

Values are expressed in kilos

 Front  360°	REACH									
	3.0 m		4.5 m		6.0 m		7.5 m		At max reach	

2.23 m dipper 600 mm shoes and bucket of 0.68 m³ - 521 kg

6.0 m					263*	2635*			2607*	2607*	6.01
4.5 m			5002*	5002*	4597*	3473			2580*	2580*	6.84
3.0 m	10 025*	9868	6431*	5186	5193*	3306			2715*	2401	7.27
1.5 m	6009*	6009*	7890*	4793	5017	3127			3025*	2265	7.38
0 m	7810*	7810*	7715	4564	4874	2999			3612*	2308	7.17
-1.5 m	11 913*	8693	7639	4499	4825	2955			4178	2579	6.61
-3.0 m	11 570*	8868	7724	4571					5431	3327	5.61
-4.5 m	8151*	8151*							6526*	6260	3.8

2.62 m dipper 600 mm shoes and bucket of 0.68 m³ - 521 kg

6.0 m					3010*	3010*			1942*	1942*	6.47
4.5 m					4237*	3494			1907*	1907*	7.25
3.0 m	8790*	8790*	5936*	5248	4881*	3316	2616*	2271	1989*	1989*	7.66
1.5 m	8200*	8200*	7501*	4827	5016	3122	3377*	2186	2190*	2066	7.76
0 m	8017*	8017*	7712	4555	4850	2974	2917*	2119	2570*	2095	7.56
-1.5 m	10 940*	8604	7590	4451	4774	2905			3306*	2310	7.03
-3.0 m	12159*	8735	7631	4486	4818	2944			4705	2880	6.1
-4.5 m	9323*	9070							6194*	4702	4.5

3.05 m dipper 600 mm shoes and bucket of 0.62 m³ - 484 kg

6.0 m					3037*	3037*			1783*	1783*	6.85
4.5 m					3864*	3549	2004*	2004*	1763*	1763*	7.59
3.0 m	7483*	7483*	5385*	5351	4546*	3359	3105*	2295	1842*	1842*	7.98
1.5 m	11 581*	9246	7049*	4898	5048	3148	3521	2193	2027*	1931	8.08
0 m	8757*	8666	7740	4575	4856	2976	3428	2108	2369*	1947	7.88
-1.5 m	10 648*	8536	7566	4427	4751	2881			3010*	2120	7.38
-3.0 m	12 692*	8615	7562	4424	4753	2884			4216	2574	6.5
-4.5 m	10 390*	8885	7008*	4573					6074*	3873	5.04

Machine in Auto mode

Lift capacities are taken in accordance with SAE J1097/ISO 10567/DIN 15019-2

Lift capacities shown in kg do not exceed 75% of the tipping load or 87% of the hydraulic lift capacity

Capacities that are marked with an asterisk (*) are hydraulic limited

If the machine is equipped with a quick coupler, subtract the weight of the quick coupler from the load shown in the table to calculate the real lift capacity

CX180B

STANDARD EQUIPMENT & OPTIONS

STANDARD EQUIPMENT

Engine control

- Common rail engine Tier III European Standards
- Electronic control of the injection system
- Automatic engine pre-heating
- Automatic/manual engine return to idle
- Exhaust Gas Recirculator
- Emergency stop
- Electrical refuel pump with automatic stop
- Fuel filter with water separator

Hydraulic control

- Auto/Heavy/Super Power working modes
- Pump torque variable control
- Automatic Power boost control
- Swing brake control
- High performance "Super Fine" synthetic fiber hydraulic filter (high contamination catch)
- Hydraulic safety valves on boom and dipper
- 2 travel speeds with auto down shifting

Operator environment

- High visibility cab with safety glass
- Adjustable and retractable armrest console with position memory
- Safety lever
- Self adjusting Air conditioning and heating system
- Cup holder
- High visibility side monitor display with automatic brightness
- Messages (function, temperature, safety, ...) on the display
- Integrated diagnostic system
- Working modes (Auto/Heavy/Super Power) combined with engine throttle
- Anti-theft device
- Hourmeter
- Selectable auxiliary hydraulic flow pre-settings
- RH front console with clock and cell phone holder
- High capacity shock absorbers on cab with 4 points fluid mountings
- Rain deflector
- Windscreen with lockable opening
- Windscreen washer and wiper
- Removable lower front windscreen with storage location in cab
- Glass cab roof window and sliding sun shade
- ISO control pattern low effort & short joysticks
- Adjustable sun visor

- Washable cab floor mat
- Rear view mirror and safety mirrors
- Storage compartments
- Integrated cool box
- 12V and 24V DC accessory sockets
- Hammer/Shear change selected from the cab
- Fore & aft adjustment of the whole seat & console

Electrical system

- Water proof connectors
- Double horn
- 2 working light on the cab
- Working light on the fuel tank
- Working light on the boom

Equipment

- EMS (Extended Maintenance System) pins and bushings as Standard (1000 hours lubrication interval for all, except buckets pins at 250 hours)
- Low friction resin side shims on boom and dipper
- Sealed and lubricated tracks
- Track guides (1 guide & front)
- Large tool box
- Pre-disposal for the optional cab protection

Operator seat

- Fully adjustable low frequency mechanical suspension seat including double acting hydraulic damper
- Weight adjustment
- Height/fore & aft adjustment
- Adjustable head rest
- Adjustable seat back angle with Fully flat seat reclining
- Adjustable arm rest
- Safety belt

OPTIONS

- Bucket/clamshell hydraulic circuit
- Hammer hydraulic circuit
- Hammer/shear hydraulic circuit
- Additional track guides (3 guides & front instead of 1 guide & front)
- Track width (600mm - 700mm - 800mm depending on the version)
- Windscreen protection
- Cab protection
- GPS (Global Positioning System) by satellite
- Centralized greasing system automatically actuated by an electrical grease pump

Standard and optional equipment shown can vary by country.

Worldwide Case Construction Equipment Contact Information

EUROPE/AFRICA/MIDDLE EAST:
Centre D'affaires EGB
5, Avenue Georges Bataille - BP 40401
60671 Le Plessis-belleville - FRANCE

NORTH AMERICA/MEXICO:
700 State Street
Racine, WI 53404 U.S.A.

LATIN AMERICA:
Av. General David Sarnoff 2237
32210 - 900 Contagem - MG
Belo Horizonte BRAZIL

ASIA PACIFIC:
Unit 1 - 1 Foundation Place - Prospect
New South Wales - 2148 AUSTRALIA

CHINA:
No. 29, Industrial Premises, No. 376,
De Bao Road, Waigaoqiao Ftz, Pudong,
SHANGHAI, 200131, P.R.C.

NOTE: Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings - consult your Case dealer. Furthermore, CNH reserves the right to modify machine specifications without incurring any obligation relating to such changes.

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