ROBEX **160LC-7**

Standard Equipment

ISO standard cabin
- All-weather steel cab with all-around visibility
- Safety glass windows
- Rise-up type windshield wiper
- Sliding fold-in front window
- Sliding side window
- Lockable door
- Hot & cool box
- Accessory box & Ash-tray

Computer Aided Power Optimization(New CAPO) system
- 2-power mode, 3-work mode, 2-user mode
- Auto deceleration & one touch deceleration system
- Auto warm up system
- Auto overheat prevention system

Heater & Defroster
Self diagnostic system
Starting Aid, cold weather

Centralized monitoring
- LCD display
  - Engine speed
  - Clock & Error code
- Gauges
  - Fuel level gauge
  - Engine coolant temperature gauge
  - Hyd. oil temperature gauge
- Warning
  - Engine coolant & Fuel level
  - Check Engine & CPU
  - Engine oil pressure
  - Engine coolant temperature
  - Hyd. oil temperature
  - Low battery
  - Air cleaner clogging
- Indicator
  - Power max.
  - Preheat & Engine warming-up
  - One touch decel

Door and cab locks, one key
AM/FM radio and cassette
- Radio remote switch

Two outside rearview mirrors
Fully adjustable suspension seat with seat belt
Slidable joystic, pilot-operated
Console box tilting system(LH.)
Three front working lights
Electric horn
Batteries (2 x 12 V x 100 AH)
Battery master switch
Automatic swing brake
Removable reservoir tank
Water separator, fuel line
Boom holding system
Arm holding system
Counterweight (2950 kg, 6500 lb)
Mono boom (5.1 m, 16′ 9″)
Arm (2.6m, 8′ 6″)
Track shoes (600 mm, 24″)
Track rail guard

Optional Equipment

Air-conditioner(5000 kcal/hr, 20000 BTU/hr)
Sun visor for cabin inside
Fuel filler pump(36 ℓ /min, 9.5 USgpm)
Beacon lamp
Safety lock valve for boom cylinder with overload warning device
Safety lock valve for arm cylinder
Single acting piping kit(breaker, etc)
Double acting piping kit(cramshell, etc)
Accumulator, work equipment lowerling
12 volt power supply(DC - DC converter)
Electric transducer
Travel alam
Various optional Arms
- Short arm (2.20 m, 7′ 3″)
- Long arm (3.10 m, 10′ 2″)

Various optional Buckets(SAE heaped)
- Standard bucket (0.70m³, 1.20 yd³)
- Narrow bucket (0.39 m³, 0.51 yd³)
- Narrow bucket (0.50 m³, 0.44 yd³)
- Narrow bucket (0.64 m³, 0.55 yd³)
- Light duty bucket(0.89 m³, 1.16 yd³)
- Heavy duty bucket(0.69 m³, 0.9 yd³)

Cabin anti-vandalism kit
Cabin lights
FOG (Falling object guard, ISO/DIS 10262)

Track shoes
- Triple grousers shoe (500mm, 20″)
- Triple grousers shoe (700mm, 28″)

Lower frame under cover
Preheating system
Tool kit
Operator suit
Special cooling
- Air vent type side door

Low noise kit

Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine shown may vary according to International standards.
All US measurment rounded off to nearest pounds or inches.

HYUNDAI
HEAVY INDUSTRIES CO.,LTD.
CONSTRUCTION EQUIPMENT DIVISION

HEAD OFFICE 1 CHEONHA - DONG, DONG-KU, ULSAN, KOREA
(Sales Office) TEL : (82)(52)230 - 2114 FAX (82)(52)230 -7979
U.S. Operation 955 ESTES AVENUE ELK GROVE VILLAGE IL.. 60007
TEL : (1)847 - 437 - 3333 FAX : (1)847 - 437 - 3574
European Operation VOSSENDAAL 11, 2440 GEEL, BELGIUM
TEL : (32)14 - 562200 FAX : (32)14 - 593405 ~ 06

PLEASE CONTACT

www.hyundai-ce.com 2003. 12 Rev 0.

Building a better future
Global Leader

Robex NEW 7 SERIES

160LC-7

Tier II Engine

CRAWLER EXCAVATOR

Mitsubishi S6S-DT :
94 kW/ 126 hp

Operating Weight
17150~17650 kg (37810~38910 lb)

Bucket capacity, SAE
0.39~0.89m³ (0.51~1.16yd³)

■ Photo may include optional equipment.

HYUNDAI
HEAVY INDUSTRIES CO.,LTD.

Built for Maximum Power, Performance, Reliability.

A new chapter in construction equipment
has now begun.
Making the dream a reality.

※ Photo may include optional equipment.

Operator's Comfort is Foremost.
Wide Cab Exceeds Industry Standards.

Visibility

- Even more visibility than before, for safer, more efficient operating.

Excellent Ventilation

- Ventilation has been improved by the addition of the larger fresh air intake system, and by providing additional air flow throughout the cab.
- Sliding front and side windows provide improved ventilation.
- A large sunroof offers upward visibility and additional ventilation.

Comfortable Operator Environment

- The control levers and seat can be adjusted to provide maximum operator comfort.
- The seat is fully adjustable for optimum operating position, reducing operator fatigue.
- Console boxes slide forward and backward for improved accessibility.
- The proportional pressure controls reduce unnecessary exertion while ensuring precise operation.
- Large windows allow excellent visibility in all directions.

Low noise design

- The Robex 7series was designed with low operation noise in mind.
- Hyundai engineering helps to keep interior and exterior noise levels to a minimum.
- The cab's noise levels have been additionally reduced by improving the door seals for the cab and engine compartments.
- An insulated diesel engine compartment with sound-damping material also reduces noise.

1 2 3 ❶ Wide, Comfortable Operating Space ❷ Steel Cover Sunroof ❸ Dial Type Engine Speed Switch and Key Switch

Wide Cab with Excellent Visibility

The cab is roomy and ergonomically designed with low noise level and good visibility.
A full view front window and large rear and side windows provide excellent visibility in all directions.

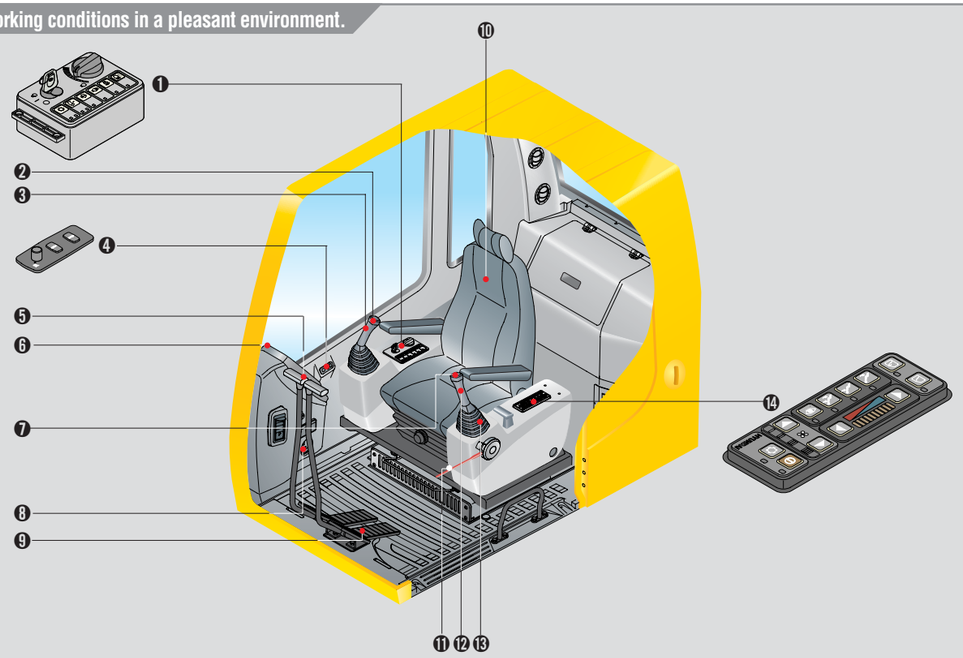
Highly Sensitive Joystick and Easy Entrance

New joystick grips for precise control have been equiped with double switches.
(Left: Power max / One touch deceleration, Right: Horn/Optional)

Easy-to-Reach Control Panels

Switches and other essential controls are located near the operator.
This helps keep operator movement to a minimum, enhancing control with less operator fatigue.

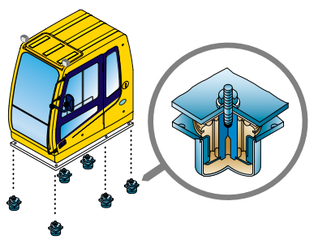
The best working conditions in a pleasant environment.



❶ Centralized control panel
❷ Horn button
❸ Option button
❹ Remote Radio control
❺ Travel lever
❻ Cluster
❼ One touch decel button
❽ Hour meter
❾ Travel pedal
❿ Fully adjustable suspension seat
⓫ Safety lever
⓬ Power boost button
⓭ Joystick control lever
⓮ Air Conditioner and Heater controller

Wide, Comfortable Operating Space

All the controls are designed and positioned according to the latest ergonomic research. Reinforced pillars have also been added for greater cab rigidity.



Minimization of Shock and Vibration through Cab Mounting System

The application of Viscous Mounting to the cabin support provides the operator with a much improved ride.
The operator work efficiency will increase as the shock and noise level in the cabin decreases.

Improved Intelligent Display

Instrument Panel is installed in front of RH console box.
It is easy to check all critical systems with easy-to-read indicators.

Smooth Travel Pedal and Foot Rests

Remote Radio Control and Deluxe Cassette

Raise-up Wiper and Cabin Lights

Raise-up wiper has enhanced for the better front view. Cabin Lights enhances safety by brightly lighting the surroundings during night work(optional)

Rear Emergency Exit Window

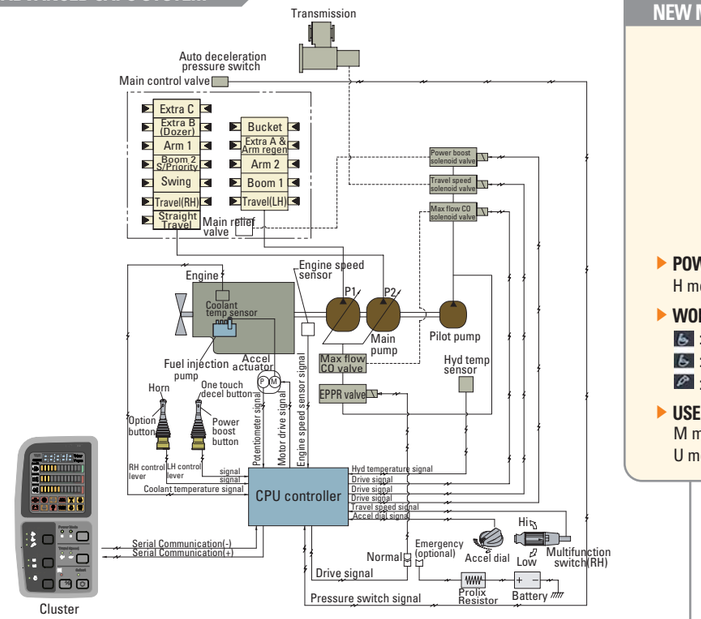
Rear Exit Window is designed with easy exit for operator's safety.

Storage box and Cup Holder

An Additional storage box and cup holder are located behind operator's seat, and it keeps food and beverages cool or hot.

Advanced Hydraulic System

ADVANCED CAPO SYSTEM



NEW MODE CONTROL SYSTEM

- **POWER MODE**
  H mode: High power S mode: Standard power
- **WORK MODE**
  : Heavy duty work
  : General work
  : Breaker
- **USER MODE**
  M mode: Maximum Power
  U mode : Memorizing Operator's Preferable Power Setting

Advanced CAPO System
The Advanced CAPO(Computer Aided Power Optimization) system maintains engine and mutual pump power at optimum levels. Mode selections are designed for various work loads and maintaining high performance while reducing fuel consumption.
Features such as auto deceleration and power boost are included in the system.
The system monitors engine speed, coolant temperature, and hydraulic oil temperature.
Contained within the system are self diagnostic capabilities which are displayed by error codes on the cluster.

Self Diagnosis System
The CPU controller diagnoses problems in the CAPO system caused by electric and hydraulic malfunctions and displays them on the LCD monitor of the cluster through error codes. This controller has the capacity to identify 48 distinct types of errors. As the information from this device, such as engine rpm, main pump delivery pressure, battery voltage, hyd. temperature, and the state of all types of electric switches, provides the operator with a much more exact state of machine operating condition.
This makes the machine easier to troubleshoot when anything does go wrong.

Arm Flow Regeneration System
Arm flow regeneration valve provides smooth arm-in operation without cavitation.

Boom & Arm Holding System
The Holding valves in the main control valve prevents the boom & arm from dropping over an extended period in neutral position.

Auto Deceleration System
When remote-control valves are in neutral position more than 4 seconds, CPU controller instructs the accel actuator to reduce engine speed to 1200rpm. This decreases, fuel consumption and reduced cab noise levels.

One Touch Decel System
When the one touch decel switch is pressed, CPU controller controls to reduce engine speed to 950 rpm. And then the one touch decel switch is pressed again, the engine speed recovers.

Max. Flow Cut-off System
For precise control and finishing work, the Max. Flow Cut-off System reduces pump flow, thus allowing smooth operation.

Automatic Engine Overheat Prevention
If the engine coolant temperature gets too high, the CPU controller lowers the engine speed and cools the engine.

Anti Restart System
The new system protects the starter from restarting during engine operation, even if the operator accidentally turns the start key again.

Power boost control System
When the power boost system is activated, digging power increases about 10%. It is especially useful when extra power is temporarily needed, for instance, when digging hard earth and rock, or if the bucket teeth are stopped by a stubborn tree root.

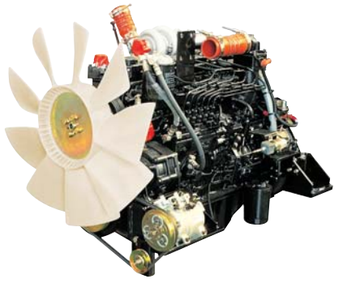
Automatic Warming-up System
After the engine is started, if the engine coolant temperature is low, the CPU controller increases the engine speed and automatically increases the pump flow rate to warm up the engine more effectively.

Pump Flow Control System
In neutral position: Pump flow is reduced to a minimum to eliminate power loss.
In operation: Maximum pump flow is delivered to the actuator to increase the speed. With movement of the control lever, pump flow is automatically adjusted and the actuator speed can be proportionally controlled.

Hydraulic Damper in Travel Pedal
Improved travel controllability & feeling by shock reducing when starting and stopping.

Increased Higher Performance

Mitsubishi S6S-DT Engine
The six cylinders turbo-charged and charged air cooled, engine is built for power, reliability and economy. This engine meets EPA tier II and EU stage II emission regulation.



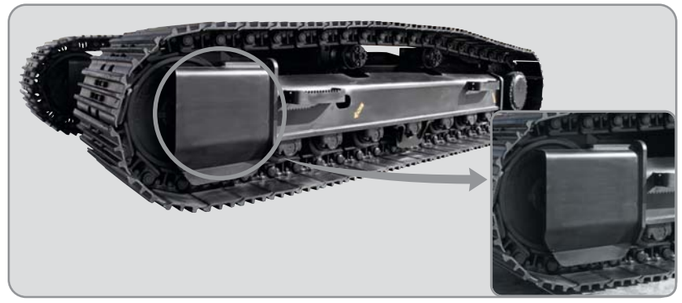
Reliability You Can Depend On
Mitsubishi S6S-DT engine is ideal solution for the toughest work environment.
The engine is built from a cast iron, skirted block with main bearing support between each cylinder. This combination provides maximum strength, rigidity, and crankshaft support. Special liquid cooling results in uniform temperature distribution.

Compact Engine Size
The compact size of the engine makes it easier to service than other engines.
The low engine height allows easy access for maintenance due to a side-mounted, gear-driven camshaft.

Reinforced Bucket and Bucket Linkage
Sealed and adjustable bucket linkage provides less wear of pins and bushes as well as silent operation.The design includes bucket link durability and anti wear characteristics. Additional reinforcement plates on cutting edge section. Reinforced bucket is made with thicker steel and additional lateral plate.

Strong and Stable Lower Frame
Reinforced box-section frame is all welded, low-stress, high-strength steel.
It guarantees safety and resistance against external impact when driving on rough ground and working on wet sites through high tensile strength steel panels, with highly durable upper and lower rollers and track guards.
Long undercarriage incoporates heavy duty excavator style components.
X-leg type center frame is integrally welded for maximum strength and durability.

Track Rail Guide & Adjusters
Durable track rail guides keep track links in place. Track adjustment is made easy with standard grease cylinder track adjusters and shock absorbing springs.



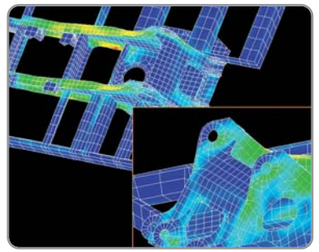
Powerful and Preciser Swing Control
Improved shock absorbing characteristics make stopping a precise and smooth action

Full open doors and master key system provide easy access for servicing.

Handrails and foot steps are applied for safety

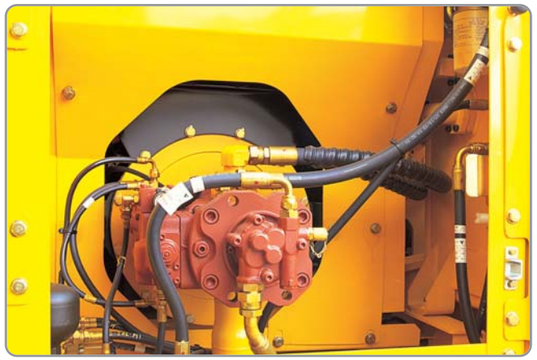
Side Cover with Left & Right Swing Open Type

Easy access to vital components gives unrestricted view of component allows easy maintenance and repair.



Durability of structure proven through FEM(Finite Element Method) analysis and long term durability test.

Large tool box for extra storage

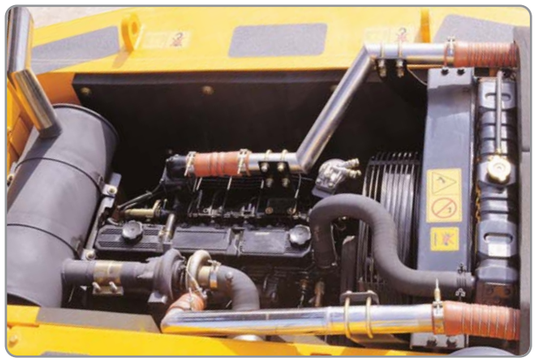


Highly efficient Hydraulic Pump

Pump output and Hydraulic tank capacity have been increased. A pilot pump has been installed resulting in improved control sensitivity.

Centralized Electric Control Box and Easy Change Air Cleaner Assembly

Electric control box and Air cleaner are centralized in one or the same compartment for easy service.



Easy to maintain engine components

The cooling and preheating system are provided for optimum and immediate operation, guaranteeing longer life for the engine and hydraulic components.
Servicing of the engine and hydraulics is considerably simplified due to total accessibility.

Engine

Model			Mitsubishi S6S-DT
Type			Water cooled, 4 cycle Diesel, 6-cylinders in line, direct injection, turbocharged charger and air cooled
Rated flywheel horse power	SAE	J1995 (gross)	126 HP (94 kW) at 2100 rpm
		J1349 (net)	116 HP (87 kW) at 2100 rpm
	DIN	6271/1 (gross)	128 PS (94 kW) at 2100 rpm
		6271/1 (net)	118 PS (87 kW) at 2100 rpm
Max. torque			42.5 kgf·m(307 lbf·ft) at 1500 rpm
Bore			94 mm (3.70")
Stroke			120 mm (4.72")
Piston displacement			4996cc (305 in³)
Batteries			2 x 12 V x 100 AH
Starting motor			24 V, 5.0kW
Alternator			24V, 50 Amp

Hydraulic system

Main pump	
Type	Two variable displacement piston pumps
Rated flow	2×168 ℓ/min (44.4 US gpm / 37.0 UK gpm)
Sub-pump for pilot circuit	Gear pump
Cross-sensing and fuel saving pump system	
Hydraulic motors	
Travel	Two speed axial piston motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake
Relief valve setting	
Implement circuits	330 kgf/cm² (4690 psi)
Travel	330 kgf/cm² (4690 psi)
Power boost (boom, arm, bucket)	360 kgf/cm² (5120 psi)
Swing circuit	240 kgf/cm² (3410 psi)
Pilot circuit	35 kgf/cm² (500 psi)
Service valve	Installed
Hydraulic cylinders	
No. of cylinder-bore x rod x stroke	Boom: 2-115×80×1090 mm (4.5"×3.1"×42.9")
	Arm: 1-120×85×1340 mm (4.7"×3.3"×52.8")
	Bucket: 1-115×80×950 mm (4.5"×3.1"×37.4")
	2PCS 1st: 2-115×80×960 mm (4.5"×3.1"×37.8")
	2nd: 1-160×95×650 mm (6.3"×3.7"×25.6")

Drives & Brakes

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	15,700 kgf (34600 lbf)
Max. travel speed(high) / (low)	5.6 km/hr (3.5 mph) / 3.7 km/hr (2.3 mph)
Gradeability	30° (58 %)
Parking brake	Wet multi-disc

Control

Pilot operated joysticks and pedals provide easy and fatigueless operation.

Pilot control	Two joysticks with one safety lever (LH): Swing and arm, (RH): Boom and bucket(ISO)
Traveling and steering	Two levers with pedals
Engine throttle	Electric, Accel dial switch (Manual throttle cable installed for emergency)
Lights	Two lights mounted on the boom, one under the tool box

Swing system

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Wet multi-disc
Swing speed	12.1 rpm

Coolant & Lubricant capacity

(refilling)	liter	US gal	UK gal
Fuel tank	260	68.7	57.2
Engine coolant	30	7.9	6.6
Engine oil	16.5	4.4	3.6
Swing device	5	1.3	1.1
Final drive(each)	3	0.8	0.7
Hydraulic system	240	63.4	52.8
Hydraulic tank	160	42.3	35.2

Undercarriage

X-leg type center frame is intergrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, idlers, track adjusters with shock absorbing spring sprockets and track chain with triple grouser shoes

Center frame	X - leg type
Track frame	Pentagonal box type
No. of shoes on each side	49
No. of carrier rollers on each side	2
No. of track rollers on each side	7
No. of track (rail) guard on each side	1

Operating weight (approximate)

Operating weight, including 5100 mm (16'9") mono boom, 2600mm (8'6")arm, heaped 0.70m³ (0.92 yd³)backhoe bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

Major component weight	
Upperstructure	4,530 kg (9,900 lb)
Counterweight	2,950 kg (6,500 lb)
5.1m(16' 9") Mono boom(with arm cylinder)	1,250 kg (2,760 lb)
Hydraulic adjustable boom(with arm cylinder)	1,780 kg (3,920 lb)

Operating weight

Shoes(Triple grouser) mm(in)	Operating weight kg(lb)	Ground pressure kgf/cm²(psi)
500(20")	17150(37810)	0.50(7.11)
※ 600(24")	**17400(38360)**	**0.42(5.97)**
700(28")	17650(38910)	0.37(5.26)

※Standard equipment

Buckets

Capacity m³ (yd³)		Width mm (in)		Weight kg(lb)	Recommendation m (ft.in)				
					Boom	※5.1m (16' 9") Mono boom			5.1m (16' 9") Hydraulic adjustable boom
SAE heaped	CECE heaped	Without side cutters	With side cutters		Arm	2.2m (7' 3")	※2.6m (8' 6")	3.1m (10' 2")	2.2m (7' 3")	2.6m (8' 6")
0.39(0.51)	0.34(0.44)	620(24.4")	740(29.1")	410(900)		●	●	●	●	●
0.50(0.65)	0.44(0.58)	760(29.9")	880(34.6")	470(1,040)		●	●	●	●	●
0.64(0.84)	0.55(0.72)	920(36.2")	1,040(40.9)	510(1,120)		●	●	■	●	■
※ 0.70(0.92)	**0.60(0.78)**	**990(39")**	**1,110(43.7")**	**540(1,190)**		●	■	▲	■	▲
0.89(1.16)	0.77(1.01)	1,220(48.0")	1,340(52.8")	610(1,340)		■	▲	–	▲	–
▣ 0.69(0.90)	0.62(0.81)	990(39.0")	-	700(1,540)		●	■	▲	■	▲

※: Standard backhoe bucket
▣: Heavy-duty

●: Applicable for materials with density of 2,000 kg / m³ (3,370 lb/ yd³) or less
■: Applicable for materials with density of 1,600 kg / m³ (2,700 lb/ yd³) or less
▲: Applicable for materials with density of 1,100 kg / m³ (1,850 lb/ yd³) or less

Backhoe attachment

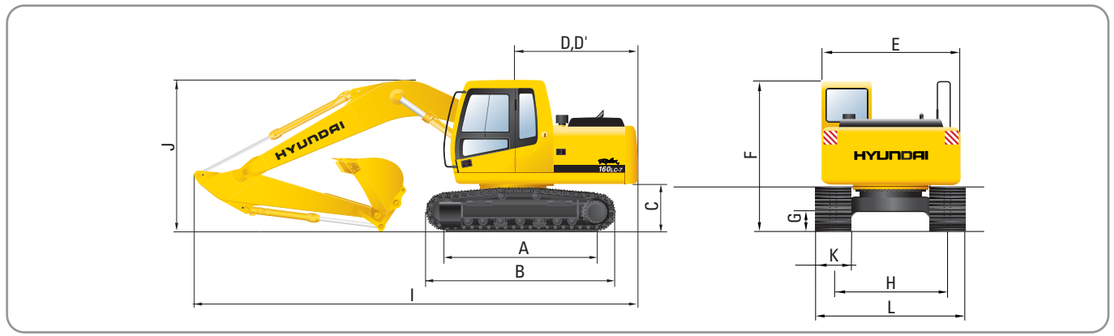
Boom and arms are of all-welded, low-stress, full-box section design. 5.1m(16'9") mono boom, 5.1m(16'9") hydraulic adjustable boom and 2.20m (7'3"), 2.60m(8'6"), 3.10m(10'2") arms are available. Buckets are all-welded, high-strength steel implements.

Digging force

Arm	Length	m(ft.in)	2.20 (7'3")	※2.60 (8' 6")	3.10 (10' 2")	Remark
	Weight	kg(lb)	750 (1,650)	**810 (1,790)**	890 (1,960)	
Bucket digging force	SAE	kN kgf lbf	108.6 [118.4] 11070 [12080] 24410 [26630]	**108.6 [118.4]** **11070 [12080]** **24410[26630]**	108.6 [118.4] 11070 [12080] 24410 [26630]	[ ]: Power Boost
	ISO	kN kgf lbf	124.5 [135.9] 12700 [13850] 28000 [30550]	**124.5 [135.9]** **12700 [13850]** **28000 [30550]**	124.5 [135.9] 12700 [13850] 28000 [30550]	
Arm crowd force	SAE	kN kgf lbf	85.2 [93.0] 8690 [9480] 19160 [20900]	**75.0 [81.8]** **7650 [8350]** **16870 [18400]**	67.4 [73.5] 6870 [7490] 15150 [16530]	
	ISO	kN kgf lbf	89.0 [97.1] 9080 [9910] 20020 [21840]	**77.6 [84.6]** **7910 [8630]** **17440 [19030]**	69.4 [75.7] 7080 [7720] 15610 [17030]	

Note : Arm weight including bucket cylinder and linkage. ※Standard arm

Dimensions R160LC-7



mm (ft · in)

A	Tumbler distance	3190 (10 ′6″)
B	Overall length of crawler	3980 (13′ 1″)
C	Ground clearance of counterweight	1035 (3′ 5″)
D	Tail swing radius	2530 (8′ 4″)
D′	Rear-end length	2480 (8′ 2″)
E	Overall width of upperstructure	2475 (8′ 1″)
F	Overall height of cab	2915 (9′ 7″)
G	Min. ground clearance	460 (1′ 6″)
H	Track gauge	1990 (6′ 6″)

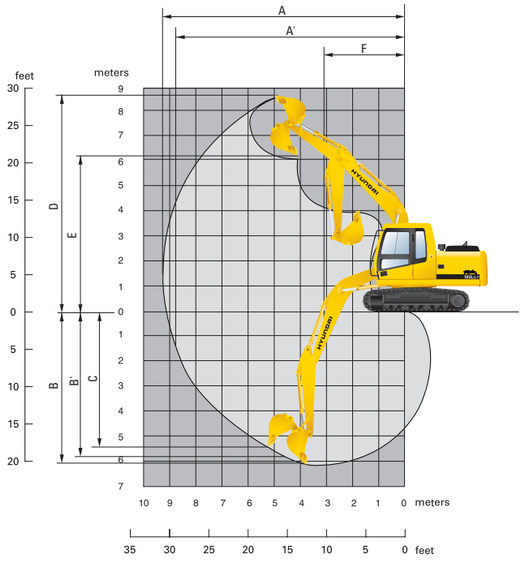
mm (ft · in)

	Boom length	※5100(16′ 9″)		
	Arm length	2200 (7′ 3″)	※**2600 (8′ 6″)**	3100 (10′ 2″)
I	Overall length	8620 (28′ 3″)	**8600 (28′ 3″)**	8600 (28′ 3″)
J	Overall height of boom	2960 (9′ 9″)	**2910 (9′ 7″)**	3090 (10′ 2″)

K	Track shoe width	500 (20″)	※**600 (24″)**	700 (28″)
L	Overall width	2490 (8′ 2″)	**2590 (8′ 6″)**	2690 (8′ 10″)

※Standard Equipment

Working ranges

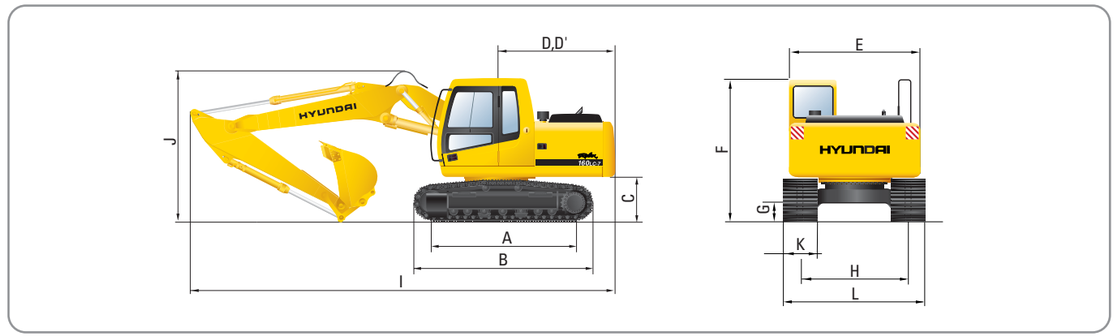


mm (ft · in)

	Boom length	※5100 (16′ 9″)		
	Arm length	2200 (7′ 3″)	※**2600 (8′ 6″)**	3100 (10′ 2″)
A	Max. digging reach	8690 (28′ 6″)	**9030 (29′ 8″)**	9450 (31′ 0″)
A′	Max. digging reach on ground	8530 (27′ 12″)	**8870 (29′ 1″)**	9300 (30′ 6″)
B	Max. digging depth	5660 (18′ 7″)	**6060 (19′ 11″)**	6560 (21′ 6″)
B′	Max. digging depth (8′ level)	5440 (17′ 10″)	**5860 (19′ 3″)**	6370 (20′ 11″)
C	Max. vertical wall digging depth	5140 (16′ 10″)	**5440 (17′ 10″)**	5730 (18′ 10″)
D	Max. digging height	8740 (28′ 8″)	**8870 (29′ 1″)**	8970 (29′ 5″)
E	Max. dumping height	6100 (20′ 0″)	**6240 (20′ 6″)**	6380 (20′ 11″)
F	Min. swing radius	3180 (10′ 5″)	**3170 (10′ 5″)**	3180 (10′ 5″)

※Standard Equipment

Dimensions R160LC-7, 2-Piece boom



mm (ft · in)

A	Tumbler distance	3190 (10 ′6″)
B	Overall length of crawler	3980 (13′ 1″)
C	Ground clearance of counterweight	1035 (3′ 5″)
D	Tail swing radius	2530 (8′ 4″)
D′	Rear-end length	2480 (8′ 2″)
E	Overall width of upperstructure	2475 (8′ 1″)
F	Overall height of cab	2915 (9′ 7″)
G	Min. ground clearance	460 (1′ 6″)
H	Track gauge	1990 (6′ 6″)

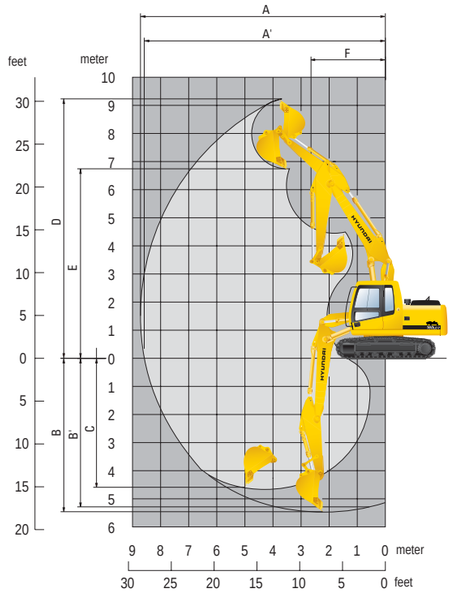
mm (ft · in)

	Boom length	※5100(16′ 9″)	
	Arm length	※**2200 (7′ 3″)**	2600 (8′ 6″)
I	Overall length	**8580 (28′ 2″)**	8570 (28′ 1″)
J	Overall height of boom	**3040 (9′ 12″)**	3050 (10′ 0″)

K	Track shoe width	500 (20″)	※**600 (24″)**	700 (28″)
L	Overall width	2490 (8′ 2″)	**2590 (8′ 6″)**	2690 (8′ 10″)

※Standard Equipment

Working ranges



mm (ft · in)

	Boom length	※5100 (16′ 9″)	
	Arm length	2200 (7′ 3″)	2600 (8′ 6″)
A	Max. digging reach	8750 (28′ 8″)	9110 (29′ 11″)
A′	Max. digging reach on ground	8600 (28′ 3″)	8960 (29′ 5″)
B	Max. digging depth	5460 (17′ 11″)	5830 (19′ 2″)
B′	Max. digging depth (8′ level)	5350 (17′ 7″)	5750 (18′ 10″)
C	Max. vertical wall digging depth	4670 (15′ 4″)	5030 (16′ 6″)
D	Max. digging height	9390 (30′ 10″)	9600 (31′ 6″)
E	Max. dumping height	6680 (21′ 11″)	6900 (22′ 8″)
F	Min. swing radius	3130 (10′ 3″)	2970 (9′ 9″)

※Standard Equipment

Lifting capacities

Rating over-front | Rating over-side or 360 degree

• **Boom :** 5.10m (16′ 9″) • **Arm :** 2.2 m (7′ 3″) • **Bucket :** 0.70 m³ SAE heaped • **Shoe :** 600mm(24″) triple grouser with 2.95ton (6,500 lb) counterweight

Load point height m(ft)		Load radius 1.5 m(5.0 ft)		3.0 m(10.0 ft)		4.5 m(15.0 ft)		6.0 m(20.0 ft)		7.5 m(25.0 ft)		At max. reach Capacity		Reach
														m (ft)
6.0 m	kg											*3390	2230	7.24
20.0 ft	lb											***7470**	**4920**	**(23.8)**
4.5 m	kg							*3860	3020			3080	1810	7.99
15.0 ft	lb							***8510**	**6660**			**6790**	**3990**	**(26.2)**
3.0 m	kg					*5440	4570	*4280	2880			2800	1610	8.36
10.0 ft	lb					***11990**	**10080**	***9440**	**6350**			**6170**	**3550**	**(27.4)**
1.5 m	kg					*6500	4190	4660	2710	*3240	1860	2730	1560	8.41
5.0 ft	lb					***14330**	**9240**	**10270**	**5970**	***7140**	**4100**	**6020**	**3440**	**(27.6)**
Ground	kg			*5860	*5860	*7040	3960	4520	2590			2860	1630	8.13
Line	lb			***12920**	***12920**	***15520**	**8730**	**9960**	**5710**			**6310**	**3590**	**(26.7)**
-1.5 m	kg	*5850	*5850	*9740	7460	*6890	3900	4480	2540			3270	1890	7.50
-5.0 ft	lb	***12900**	***12900**	***21470**	**16450**	***15190**	**8600**	**9880**	**5600**			**7210**	**4170**	**(24.6)**
-3.0 m	kg			*8500	7650	*5940	3980					*2930	2530	6.37
-10.0 ft	lb			***18740**	**16870**	***13100**	**8770**					***6460**	**5580**	**(20.9)**

• **Boom :** 5.10m (16′ 9″) • **Arm :** 2.6 m (8′ 6″) • **Bucket :** 0.70 m³ SAE heaped • **Shoe :** 600mm(24″) triple grouser with 2.95ton (6,500 lb) counterweight

Load point height m(ft)		Load radius 1.5 m(5.0 ft)		3.0 m(10.0 ft)		4.5 m(15.0 ft)		6.0 m(20.0 ft)		7.5 m(25.0 ft)		At max. reach Capacity		Reach
														m (ft)
6.0 m	kg											*3120	2010	7.66
20.0 ft	lb											***6880**	**4430**	**(25.1)**
4.5 m	kg											2850	1640	8.37
15.0 ft	lb											**6280**	**3620**	**(27.5)**
3.0 m	kg							*4020	2890	*2940	1920	2600	1470	8.72
10.0 ft	lb							***8860**	**6370**	***6480**	**4230**	**5730**	**3240**	**(28.6)**
1.5 m	kg			*6640	*6640	*6170	4220	*4550	2700	3250	1840	2540	1420	8.77
5.0 ft	lb			***14640**	***14640**	***13600**	**9300**	***10030**	**5950**	**7170**	**4060**	**5600**	**3130**	**(28.8)**
Ground	kg			*6650	*6650	*6880	3940	4510	2550	3180	1780	2650	1480	8.50
Line	lb			***14660**	***14660**	***15170**	**8690**	**9940**	**5620**	**7010**	**3920**	**5840**	**3260**	**(27.9)**
-1.5 m	kg	*5680	*5680	*9340	7340	*6930	3840	4440	2480			2980	1680	7.90
-5.0 ft	lb	***12520**	***12520**	***20590**	**16180**	***15280**	**8470**	**9790**	**5470**			**6570**	**3700**	**(25.9)**
-3.0 m	kg	*8890	*8890	*9150	7480	*6240	3880	*4340	2520			*2970	2180	6.86
-10.0 ft	lb	***19600**	***19600**	***20170**	**16490**	***13760**	**8550**	***9570**	**5560**			***6550**	**4810**	**(22.5)**
-4.5 m	kg			*6330	*6330	*4220	4080							
-15.0 ft	lb			***13960**	***13960**	***9300**	**8990**							

• **Boom :** 5.10m (16′ 9″) • **Arm :** 2.2 m (7′ 3″) • **Bucket :** 0.70 m³ SAE heaped • **Shoe :** 600mm(24″) triple grouser with 2.95ton (6,500 lb) counterweight

Load point height m(ft)		Load radius 1.5 m(5.0 ft)		3.0 m(10.0 ft)		4.5 m(15.0 ft)		6.0 m(20.0 ft)		At max. reach Capacity		Reach
												m (ft)
7.5 m	kg									*3400	3380	5.81
25.0 ft	lb									***7500**	**7450**	**(19.1)**
6.0 m	kg									*3340	2300	7.16
20.0 ft	lb									***7360**	**5070**	**(23.5)**
4.5 m	kg					*4260	*4260	*3820	3030	3120	1860	7.92
15.0 ft	lb					***9390**	***9390**	***8420**	**6680**	**6880**	**4100**	**(26.0)**
3.0 m	kg			*8470	*8470	*5390	4580	*4280	2890	2830	1660	8.30
10.0 ft	lb			***18670**	***18670**	***11880**	**10100**	***9440**	**6370**	**6240**	**3660**	**(27.2)**
1.5 m	kg					*6540	4220	4640	2740	2760	1600	8.34
5.0 ft	lb					***14420**	**9300**	**10230**	**6040**	**6080**	**3530**	**(27.4)**
Ground	kg			*6700	*6700	7130	4010	4510	2620	2890	1680	8.06
Line	lb			***14770**	***14770**	**15720**	**8840**	**9940**	**5780**	**6370**	**3700**	**(26.4)**
-1.5 m	kg	*6610	*6610	*10490	7530	7060	3950	4460	2570	3300	1930	7.42
-5.0 ft	lb	***14570**	***14570**	***23130**	***16600**	**15560**	**8710**	**9830**	**5670**	**7280**	**4250**	**(24.3)**
-3.0 m	kg	*10560	*10560	*8970	7680	*6210	4010			*3380	2570	6.28
-10.0 ft	lb	***23280**	***23280**	***19780**	**16930**	***13690**	**8840**			***7450**	**5670**	**(20.6)**
-4.5 m	kg			*5840	*5840							
-15.0 ft	lb			***12870**	***12870**							

NOTES
1. Lifting capacity are based on SAE J1097, ISO 10567.
2. Lifting capacity of the Robex Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook (standard equipment) located on the back of the bucket.
4. (*) indicates load limited by hydraulic capacity.

Lifting capacities

Rating over-front | Rating over-side or 360 degree

• **Boom :** 5.10m (16′ 9″) • **Arm :** 2.6 m (8′ 6″) • **Bucket :** 0.70 m³ SAE heaped • **Shoe :** 600mm(24″) triple grouser with 2.95ton (6,500 lb) counterweight

Load point height m(ft)		Load radius 1.5 m(5.0 ft)		3.0 m(10.0 ft)		4.5 m(15.0 ft)		6.0 m(20.0 ft)		7.5 m(25.0 ft)		At max. reach Capacity		Reach
														m (ft)
7.0 m	kg											*3080	2940	6.33
25.0 ft	lb											***6790**	**6480**	**(20.8)**
6.0 m	kg							*2760	*2760			*3070	2090	7.56
20.0 ft	lb							***6080**	***6080**			***6770**	**4610**	**(24.8)**
4.5 m	kg							*3500	3050			2880	1710	8.28
15.0 ft	lb							***7720**	**6720**			**6350**	**3770**	**(27.2)**
3.0 m	kg			*7360	*7360	*4940	4630	*4000	2900	*2560	1940	2630	1520	8.64
10.0 ft	lb			***16230**	***16230**	***10890**	**10210**	***8820**	**6390**	***5640**	**4280**	**5800**	**3350**	**(28.3)**
1.5 m	kg			*7670	*7670	*6190	4250	*4570	2720	3220	1870	2560	1470	8.68
5.0 ft	lb			***16910**	***16910**	***13650**	**9370**	***10080**	**6000**	**7100**	**4120**	**5640**	**3240**	**(28.5)**
Ground	kg			*7420	*7420	*6980	3990	4480	2590	3150	1810	2660	1520	8.42
Line	lb			***16360**	***16360**	***15390**	**8800**	**9880**	**5710**	**6940**	**3990**	**5860**	**3350**	**(27.6)**
-1.5 m	kg	*6300	*6300	*10000	7410	6990	3890	4400	2520			3000	1730	7.81
-5.0 ft	lb	***13890**	***13890**	***22050**	**16340**	**15410**	**8580**	**9700**	**5560**			**6610**	**3810**	**(25.6)**
-3.0 m	kg	*9330	*9330	*9580	7530	*6480	3910	4430	2540			*3370	2230	6.75
-10.0 ft	lb	***20570**	***20570**	***21120**	**16600**	***14290**	**8620**	**9770**	**5600**			***7430**	**4920**	**(22.1)**
-4.5 m	kg			*6950	6950	*4610	4090							
-15.0 ft	lb			***15320**	**15320**	***10160**	**9020**							

• **Boom :** 5.10m (16′ 9″) • **Arm :** 3.1 m (11′ 1″) • **Bucket :** 0.70 m³ SAE heaped • **Shoe :** 600mm(24″) triple grouser with 2.95ton (6,500 lb) counterweight

Load point height m(ft)		Load radius 1.5 m(5.0 ft)		3.0 m(10.0 ft)		4.5 m(15.0 ft)		6.0 m(20.0 ft)		7.5 m(25.0 ft)		At max. reach Capacity		Reach
														m (ft)
7.0 m	kg											*2730	2520	6.92
25.0 ft	lb											***6020**	**5560**	**(22.7)**
6.0 m	kg							*2640	*2640			*2760	1850	8.05
20.0 ft	lb							***5820**	***5820**			***6080**	**4080**	**(26.4)**
4.5 m	kg							*3110	3080	*1940	*1940	2630	1530	8.73
15.0 ft	lb							***6860**	**6790**	***4280**	***4280**	**5800**	**3370**	**(28.6)**
3.0 m	kg					*4380	*4380	*3640	2920	*2840	1940	2410	1370	9.06
10.0 ft	lb					***9660**	***9660**	***8020**	**6440**	***6260**	**4280**	**5310**	**3020**	**(29.7)**
1.5 m	kg			*9510	8060	*5730	4300	*4290	2720	3200	1850	2340	1310	9.10
5.0 ft	lb			***20970**	**17770**	***12630**	**9480**	***9460**	**6000**	**7050**	**4080**	**5160**	**2890**	**(29.9)**
Ground	kg			*8210	7460	*6710	3990	4460	2560	3120	1770	2420	1350	8.85
Line	lb			***18100**	**16450**	***14790**	**8800**	**9830**	**5640**	**6880**	**3900**	**5340**	**2980**	**(29.0)**
-1.5 m	kg	*5960	*5960	*9730	7320	6940	3830	4350	2470	*2970	1730	2680	1510	8.28
-5.0 ft	lb	***13140**	***13140**	***21450**	**16140**	**15300**	**8440**	**9590**	**5450**	***6550**	**3810**	**5910**	**3330**	**(27.2)**
-3.0 m	kg	*8420	*8420	*10150	7380	*6700	3820	4340	2450			*3290	1900	7.30
-10.0 ft	lb	***18560**	***18560**	***22380**	**16270**	***14770**	**8420**	**9570**	**5400**			***7250**	**4190**	**(24.0)**
-4.5 m	kg	*11640	*11640	*8040	7600	*5380	3930							
-15.0 ft	lb	***25660**	***25660**	***17730**	**16760**	***11860**	**8660**							

NOTES
1. Lifting capacity are based on SAE J1097, ISO 10567.
2. Lifting capacity of the Robex Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook (standard equipment) located on the back of the bucket.
4. (*) indicates load limited by hydraulic capacity.