



Robex 110-7A

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

Mechanical suspension seat with heater

(Europe / North America)

AM/FM radio and cassette

- Radio remote switch

Two outside rearview mirrors

Fully adjustable suspension seat with seat belt

Slidable joystick, pilot-operated

Console box tilting system(LH.)

Three front working lights

Electric horn

Batteries (2 x 12 V x 80 AH)

Battery master switch

Automatic swing brake

Removable reservoir tank

Fuel prefilter with fuel warmer

Boom holding system

Arm holding system

Counterweight (1450 kg, 3200 lb)

Mono boom (4.3 m, 14' 1")

Arm (2.26m, 7' 5")

Track shoes (500 mm, 20")

Track rail guard

Optional Equipment

Air-conditioner(5000 kcal/hr, 20000 BTU/hr)

Sun visor for cabin inside

Fuel filler pump(35 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(clamshell, etc)

Accumulator, work equipment lowering

12 volt power supply(DC - DC converter)

Electric transducer

CD Player Radio

Travel alarm

Various optional Arms

- Short arm (1.96 m, 6' 5")
- Long arm (2.91 m, 9' 3")

Various optional Buckets(SAE heaped)

- Standard bucket (0.45m³, 0.59 yd³)
- Narrow bucket (0.30 m³, 0.39 yd³)
- Narrow bucket (0.40 m³, 0.52 yd³)
- Light duty bucket (0.50 m³, 0.65 yd³)
- Heavy duty bucket (0.59 m³, 0.77 yd³)

Cabin lights

Cabin FOPS/FOG (IOS 10262)

Cabin Roof - Cover Transparent Type

Track shoes

- Triple grousers shoe (600mm, 24")
- Triple grousers shoe (700mm, 28")

Counterweight (1700kg, 3750lb)

Lower frame under cover

Tool kit

Rotating piping kit

Operator suit

Special cowling

- Air vent type side door

Seat

- Adjustable air suspension seat
- Adjustable air suspension seat with heater



■ Some of the Photo may include optional equipment.



CRAWLER EXCAVATOR **Applied Tier 3 Engine**

110-7A / 110D-7A

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

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HEAVY INDUSTRIES CO.,LTD.

We build a better future

Built for Maximum Power, Performance, Reliability.

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

Robex **110-7A**
110D-7A



■ Some of the photo may include optional equipment.

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

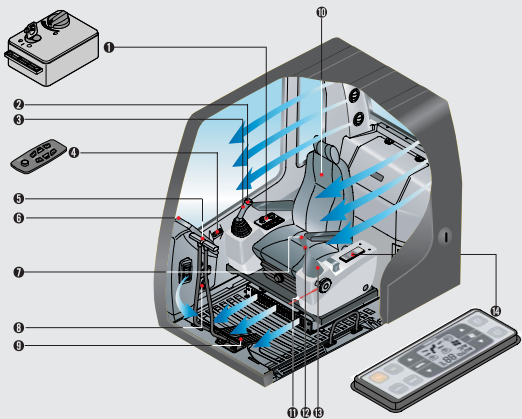
Technology in Cab Design



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.

The best working conditions in a pleasant environment.



- 1 Centralized control panel
- 2 Horn button
- 3 Option button
- 4 Remote Radio control
- 5 Travel lever
- 6 Cluster
- 7 One touch decel button
- 8 Hour meter
- 9 Travel pedal
- 10 Fully adjustable suspension seat
- 11 Safety lever
- 12 Power boost button
- 13 Joystick control lever
- 14 Air Conditioner and Heater controller



Wide, Comfortable Operating Space



Steel Cover Sunroof



Remote Radio Control and Deluxe Cassette



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.



Highly Sensitive Joystick and Easy Entrance

New joystick grips for precise control have been equipped with 4 switches.

- Power boost
- Left One touch deceleration Dummy
- Right Horn/Optional/Dummy



Easy-to-Reach Control Panels

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



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.



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)



Automatic Engine Overheat Prevention

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



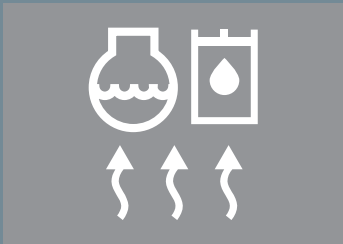
Anti Restart System

The new system protects the starter from re-starting 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.

Mitsubishi D04FD-TAA Engine

The Four cylinders turbocharged and charged air cooled, engine is built for power, reliability and economy. This engine meets EPA tier 3 and EUstage 3A emission regulation.



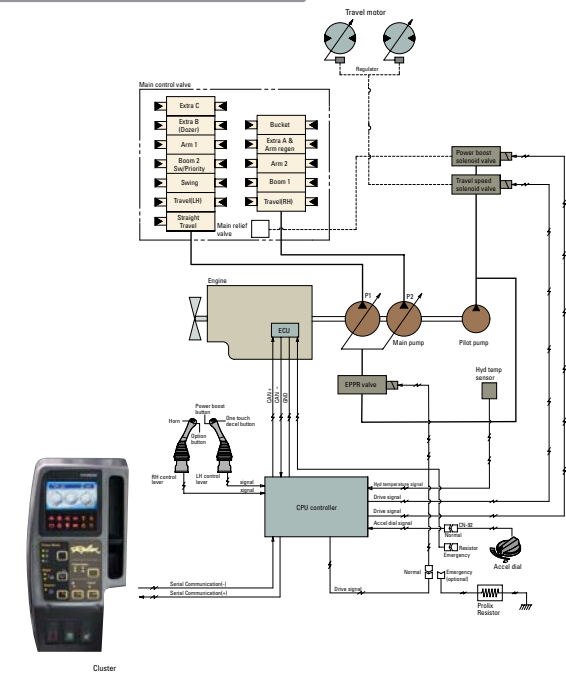
Reliability You Can Depend On

When you have a tough job to do you need the power precision and flexibility of Mitsubishi D04FD-TAA engines. It features major enhancements to make every piece of equipment work harder, smarter, quieter and longer. The High Pressure Common Rail Fuel System provides enhanced engine performance with higher torque and better throttle response at every rpm without compromising fuel economy.

The Mitsubishi D04FD-TAA engine is based on the highly successful Mitsubishi SK series engines. These engines combine proven full authority electronic controls with reliable performance you expect from one of the most successful and durable engine design.

Advanced Hydraulic System

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.

Arm Flow Regeneration System

Arm flow regeneration valve provides smooth arm-in operation without cavitations.

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.

One Touch Deceleration

When the one touch deceleration button on top of LH joystick is pushed once, the engine rpm will be immediately down to low idle rpm. Engine speed will be recovered to its preselected rpm in case the button is pushed once more.

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



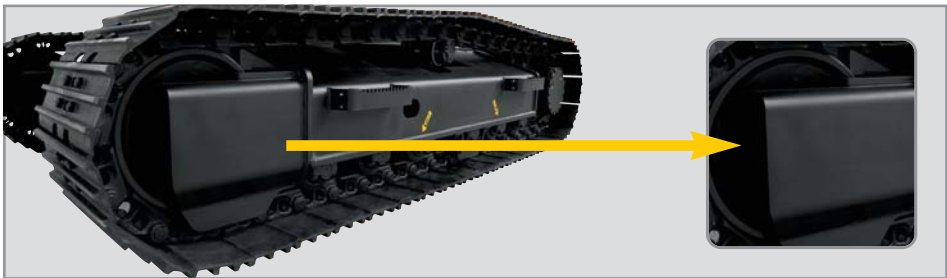
Reinforced Bucket and Bucket Linkage

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 incorporates 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



NEW MODE CONTROL SYSTEM



1 POWER MODE
H mode : High power
S mode : Standard power
L mode : Light power

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 by error codes. This controller has the capacity to identify 26 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.

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

Reliability & Serviceability



Side Cover with Left & Right Swing Open Type
Easy access to vital components gives unrestricted view of component allows easy maintenance and repair.



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.



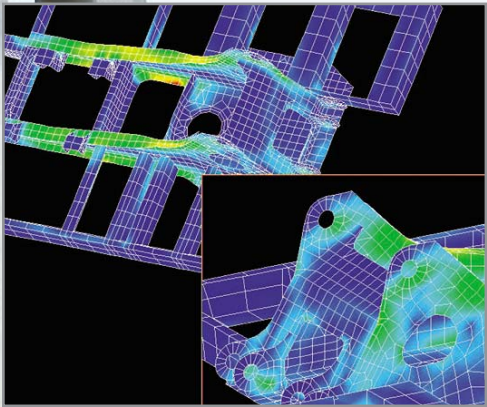
Centralized Electric Control Box and Easy Change Air Cleaner Assembly
Electric control box and Air cleaner are centralized in one or the same compartment for easy service.



Highly efficient Hydraulic Pump
Pump output capacity has been increased.



Large tool box for extra storage



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



Specifications



Engine

Model			Mitsubishi D04FD-TAA
Type			Water cooled, 4 cycle Diesel. 4 Cylinders in line, direct injection turbocharged and charged air cooled low emission
Rated horse power	SAE	J1995(gross)	96.7HP (72kW) at 1,800rpm
		J1349(net)	89HP (66kW) at 1,800rpm
	DIN	6271/1(gross)	98PS (72kW) at 1,800rpm
		6271/1(net)	90PS (66kW) at 1,800rpm
Max. torque			42.8kgf·m (310lbf·ft) at 1,400rpm
Bore X stroke			102 x 130mm (4.0" x 5.1")
Piston displacement			4,249cc (259 cu in)
Batteries			2 x 12V x 80AH
Starter motor			24V-5.0kW
Alternator			24V- 50 Amp



Hydraulic system

Main pump	
Type	Two variable displacement piston pumps
Max. flow	2 x 107 ℓ /min (29.6US gpm / 24.6UK 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(4,690psi)
Travel	330 kgf/cm² (4,690 psi)
Power boost (boom, arm, bucket)	360 kgf/cm²(5,120psi)
Swing circuit	240 kgf/cm²(3,410psi)
Pilot circuit	35 kgf/cm²(498psi)
Service valve	Installed
Hydraulic cylinders	
No. of cylinder- bore x rod x stroke	Boom: 2 - 95 x 70 x 1015mm (3.7" x 2.7" x 40.0")
	Arm: 1 - 110 x 75 x 1070mm (4.3" x 3.0" x 42.1")
	Bucket: 1 - 95 x 65 x 855mm (3.7" x 2.6" x 33.7")
	Blade: 2-100 x 70 x240mm (3.9" x 2.7" x 9.4")



Drives & Brakes

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	11,000 kgf (24,250 lbf)
Max. travel speed(high) / (low)	5.2 km/hr (3.2mph) / 3.2 km/hr (2.1mph)
Gradeability	35° (70%)
Parking brake	Multi wet disc



Control

Pilot pressure operated joysticks and pedals with detachable lever provide almost effortless 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 and pedals
Engine throttle	Electric, Dial type
External lights	Two lights mounted on the boom, one under the battery box



Swing system

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Multi wet disc
Swing speed	12.0 rpm



Coolant & Lubricant capacity

(Refilling)	liter	US gal	UK gal
Fuel tank	250	66.0	55.0
Engine coolant	22	6.3	5.3
Engine oil	17.5	4.6	3.8
Swing device	2.5	0.7	0.5
Final drive(each)	2.5	0.7	0.5
Hydraulic system(including tank)	180	47.6	39.6
Hydraulic tank	100	26.4	22.0



Undercarriage

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

Center frame	X - leg type
Track frame	Pentagonal box type
No. of shoes on each side	41
No. of carrier roller on each side	1
No. of track roller on each side	6
No. of rail guard on each side	1



Operating weight (approximate)

Operating weight, including 4,300mm (14' 1") boom, 2,260m (7' 5") arm, SAE heaped 0.45m³ (0.59yd³) backhoe bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

Major component weight

Upperstructure	3,300kg (7,280lb)
Counterweight	1,450kg (3,200lb)
Boom (with Arm cylinder)	950kg (2,090lb)

Operating weight






Shoes		Operating weight		Ground pressure
Type	Width mm(in)	kg(lb)		kgf/cm²(psi)
Triple grouser	※ 500(20")	R110-7A	11,200(24,690)	0.39(5.55)
		R110D-7A	11,900 (26,230)	0.42(5.97)
	600(24")	R110-7A	11,500(25,350)	0.34(4.84)
		R110D-7A	12,200(26,900)	0.36(5.12)
	700(28")	R110-7A	11,800(26,010)	0.30(4.27)
		R110D-7A	12,500(27,560)	0.31(4.41)

※ Standard equipment

Backhoe attachment



Buckets

SAE heaped m³ (yd³)					
	0.30(0.39)	0.40(0.52)	※0.45(0.59)	0.50(0.65)	0.59(0.77)

Capacity m³ (yd³)		Width mm (in)		Weight kg(lb)	Mono Boom Arm	Recommendation mm(ft.in)		
SAE heaped	CECE heaped	Without side cutters	With side cutters			※ 4,300 (14' 1")	※ 2,260 (7' 5")	2,810 (9' 3")
0.30 (0.39)	0.27 (0.35)	610 (24.0)	720 (28.3)	360 (790)	●	●	●	●
0.40 (0.52)	0.36 (0.47)	760 (29.9)	870 (34.3)	410 (900)	●	●	●	●
※0.45 (0.59)	0.40 (0.52)	830 (32.7)	940 (37.0)	430 (950)	●	●	●	■
0.50 (0.65)	0.45 (0.59)	900 (35.4)	1,010 (39.8)	450 (990)	●	■	■	▲
0.59 (0.77)	0.52 (0.68)	1,020 (40.2)	1,130 (44.5)	490 (1,080)	■	▲	▲	—

※ : Standard backhoe bucket

- 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. 4,300mm(14' 4") mono boom and 1,960m(6' 5"), 2,260m (7' 5"), 2,810mm (9' 3") arm are available. Buckets are all-welded, high-strength steel implements.

		
1,960mm (6' 5")	※2,260mm (7' 5")	2,810mm (9' 3")



Digging force

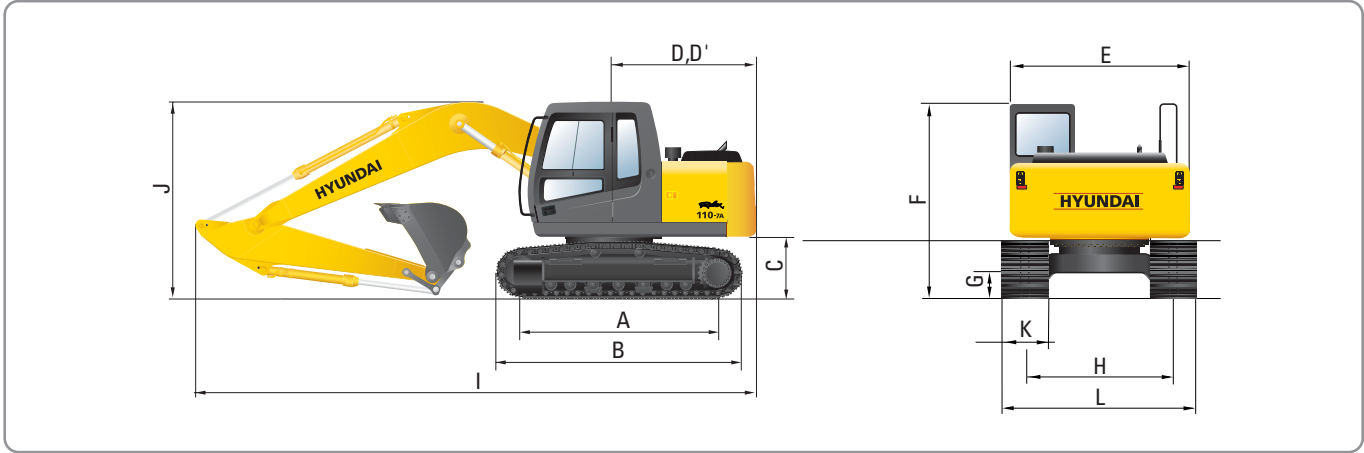
Arm	Length	mm(ft-in)	1,960mm (6'5")	※2,260mm (7' 5")	2,810mm (9'3")	Remark
	Weight	kg(lb)	320(710)	340(750)	400(880)	
Bucket digging force	SAE	kN	78.5[85.6]	78.5[85.6]	78.5[85.6]	[]: Power Boost
		kgf	8,000[8,730]	8,000[8,730]	8,000[8,730]	
		lbf	17,640[19,240]	17,640[19,240]	17,640[19,240]	
	ISO	kN	90.2[98.4]	90.2[98.4]	90.2[98.4]	
		kgf	9,200[10,040]	9,200[10,040]	9,200[10,040]	
		lbf	20,280[22,120]	20,280[22,120]	20,280[22,120]	
Arm crowd force	SAE	kN	60.2[65.7]	55.7[60.8]	48.1[52.4]	
		kgf	6,140[6,700]	5,680[6,200]	4,900[5,350]	
		lbf	13,540[14,770]	12,520[13,660]	10,800[11,780]	
	ISO	kN	62.9[68.6]	58.1[63.3]	49.7[54.2]	
		kgf	6,410[6,990]	5,920[6,460]	5,070[5,530]	
		lbf	14,130[15,410]	13,050[14,240]	11,180[12,200]	

※ Standard equipment

Dimensions & Working ranged



Dimensions R110-7A



mm (ft · in)

Description	R110-7A
A Tumbler distance	2,610 (8'7")
B Overall length of crawler	3,340 (10'11")
C Ground clearance of counterweight	900 (2'11")
D Tail swing radius	2,130 (7'0")
D' Rear-end length	2,110 (6'11")
E Overall width of upperstructure	2,475 (8'1")
F Overall height of cabin	2,800 (9'2")
G Min. ground clearance	440 (1'5")
H Track gauge	1,990 (6'6")

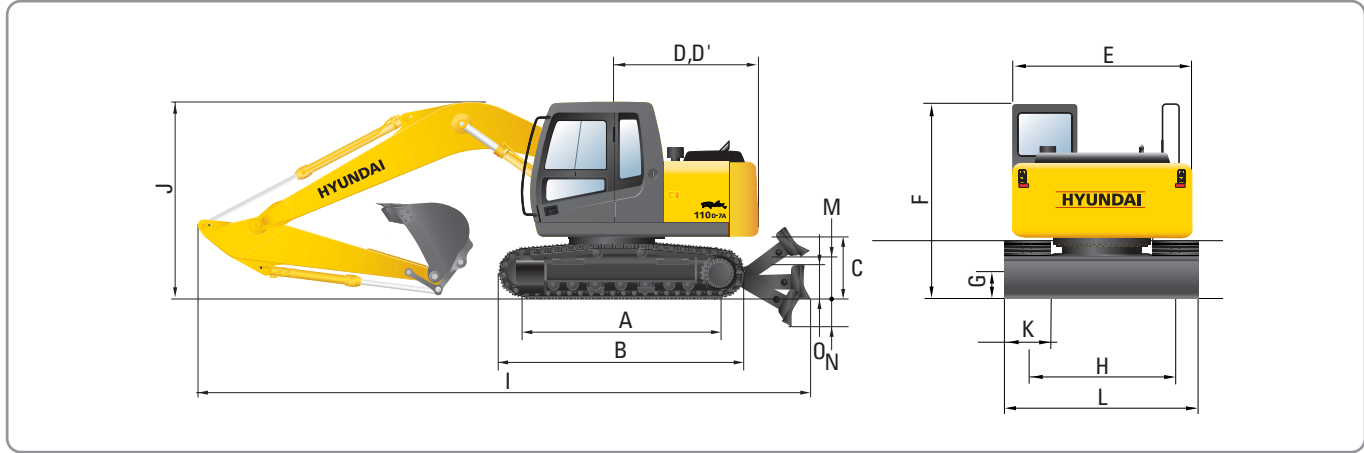
mm (ft · in)

Description	※ 4,300 (14' 1") Mono boom		
Boom length			
Arm length	1,960 (6' 5")	※ 2,260 (7' 5")	2,810 (9' 3")
I Overall length	7,240 (23' 9")	7,270 (23' 10")	7,230 (23' 9")
J Overall height of boom	2,550 (8' 4")	2,720 (8' 11")	3,060 (10' 0")
K Track shoe width	500 (20")	600 (24")	700 (28")
L Overall width	2,490 (8' 2")	2,590 (8' 6")	2,690 (8' 10")

※ Standard equipment



Dimensions R110D-7A



mm (ft · in)

Description	R110D-7A
A Tumbler distance	2,610 (8'7")
B Overall length of crawler	3,340 (10'11")
C Ground clearance of counterweight	900 (2'11")
D Tail swing radius	2,130 (7'0")
D' Rear-end length	2,110 (6'11")
E Overall width of upperstructure	2,475 (8'1")
F Overall height of cabin	2,800 (9'2")
G Min. ground clearance	440 (1'5")
H Track gauge	1,990 (6'6")
M Ground Clearance of blade up	500 (1' 8")
N Depth of blade down	520 (1' 8")

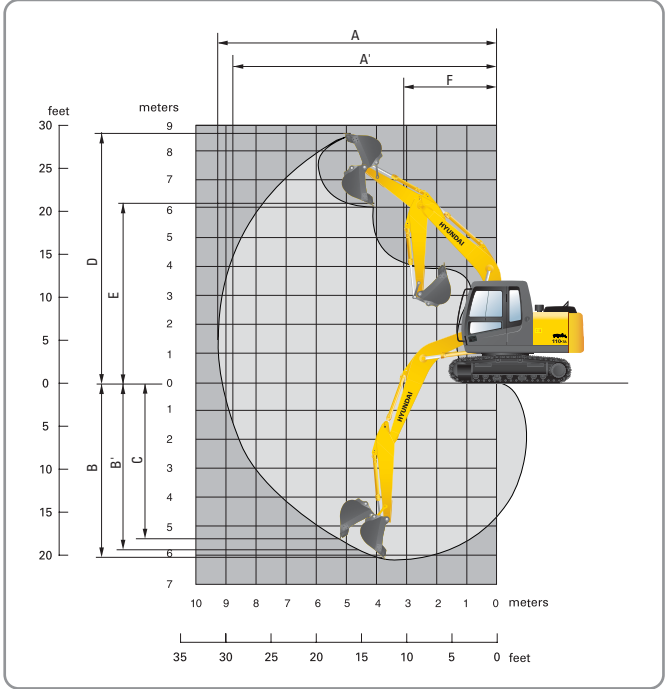
mm (ft · in)

O Height of blade	550 (1' 10")		
Width of blade	2,500 (8' 2")		
Boom length	※ 4,300 (14' 1") Mono boom		
Arm length	1,960 (6' 5")	※ 2,260 (7' 5")	2,810 (9' 3")
I Overall length	7,620 (25' 0")	7,650 (25' 1")	7,610 (25' 0")
J Overall height of boom	2,550 (8' 4")	2,720 (8' 11")	3,060 (10' 0")
K Track shoe width	500 (20")	600 (24")	700 (28")
L Overall width	2,490 (8' 2")	2,590 (8' 6")	2,690 (8' 10")

※ Standard equipment



Working ranges R110-7A



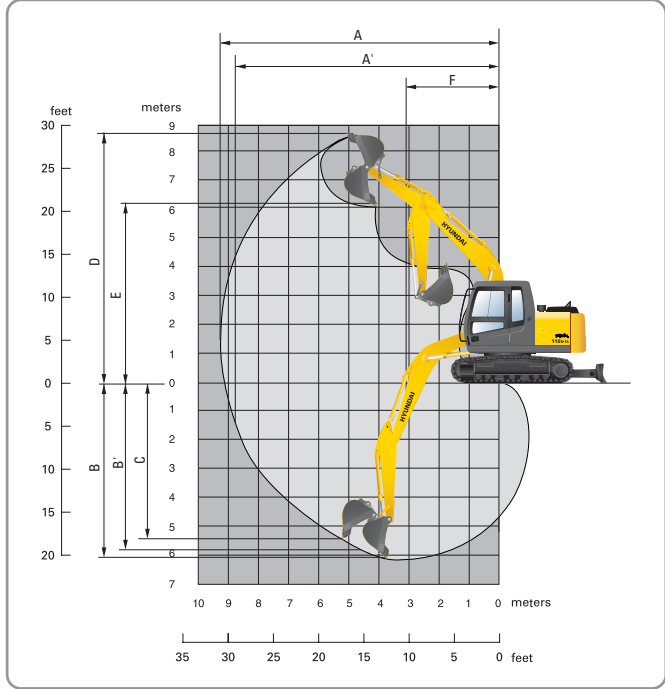
mm (ft · in)

Description	R110-7A		
Boom length	※ 4,300 (14' 1") mono boom		
Arm length	1,960 (6'5")	※ 2,260 (7' 5")	2,810 (9' 3")
A Max. digging reach	7,460 (24' 6")	7,740 (25'5")	8,270 (27' 2")
A' Max. digging reach on ground	7,320 (24' 0")	7,610 (25' 0")	8,140 (26' 8")
B Max. digging depth	4,770 (15' 8")	5,090 (16' 8")	5,620 (18' 5")
B' Max. digging depth (8' level)	4,510 (14' 10")	4,870 (16' 0")	5,410 (17' 9")
C Max. vertical digging depth	4,070 (13' 4")	4,430 (14' 6")	4,940 (16' 2")
D Max. digging height	7,900 (25' 11")	8,070 (26' 6")	8,460 (27' 9")
E Max. dumping height	5,540 (18' 2")	5,710 (18' 9")	6,100 (20' 0")
F Min. swing radius	2,340 (7' 8")	2,380 (7' 10")	2,510 (8' 3")

※ Standard equipment



Working ranges R110D-7A



mm (ft · in)

Description	R110D-7A		
Boom length	※ 4,300 (14' 1") mono boom		
Arm length	1,960 (6'5")	※ 2,260 (7' 5")	2,810 (9' 3")
A Max. digging reach	7,460 (24' 6")	7,740 (25'5")	8,270 (27' 2")
A' Max. digging reach on ground	7,320 (24' 0")	7,610 (25' 0")	8,140 (26' 8")
B Max. digging depth	4,770 (15' 8")	5,090 (16' 8")	5,620 (18' 5")
B' Max. digging depth (8' level)	4,510 (14' 10")	4,870 (16' 0")	5,410 (17' 9")
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E Max. dumping height	5,540 (18' 2")	5,710 (18' 9")	6,100 (20' 0")
F Min. swing radius	2,340 (7' 8")	2,380 (7' 10")	2,510 (8' 3")

※ Standard equipment

Lifting Capacities



Lifting capacities R110-7A



Rating over-front



Rating over-side or 360 degree

• Boom: 4.3 m (14' 1") • Arm: 2.26 m (7' 5") • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe : 500mm(20") triple grouser with 1,450kg(3,200 lb) CWT

Load Point height m(ft)		Load radius								At max. reach		
		1.5m (5.0ft)		3.0m (10.0ft)		4.5m (15.0ft)		6.0m (20.0ft)		Capacity		Reach
												m (ft)
6.0m	kg					*1,750	*1,750			*1,750	1,560	5.99
20.0ft	lb					*3,860	*3,860			*3,860	3,440	(19.7)
4.5m	kg					*1,790	*1,790	*1,530	1,490	1,520	1,130	6.92
15.0ft	lb					*3,950	*3,950	*3,370	3,280	3,350	2,490	(22.7)
3.0m	kg			*2,820	*2,820	*2,270	*2,270	1,940	1,450	1,300	940	7.38
10.0ft	lb			*6,220	*6,220	*5,000	*5,000	4,280	3,200	2,870	2,070	(24.2)
1.5m	kg			*4,700	4,370	*2,970	2,250	1,840	1,360	1,240	880	7.46
5.0ft	lb			*10,360	9,630	*6,550	4,960	4,060	3,000	2,730	1,940	(24.5)
Ground Line	kg			5,660	3,950	2,830	2,060	1,760	1,280	1,300	930	7.18
	lb			12,480	8,710	6,240	4,540	3,880	2,820	2,870	2,050	(23.6)
-1.5m	kg	*5,580	*5,580	5,550	3,850	2,740	1,980	1,720	1,240	1,560	1,130	6.49
-5.0ft	lb	*12,300	*12,300	12,240	8,490	6,040	4,370	3,790	2,730	3,440	2,490	(21.3)
-3.0m	kg	*8,530	*8,530	*5,440	3,930	2,770	2,010			*2,270	1,730	5.17
-10.0ft	lb	*18,810	*18,810	*11,990	8,660	6,110	4,430			*5,000	3,810	(17.0)

• Boom: 4.3 m (14' 1") • Arm: 1.96 m (6' 5") • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe : 500mm(20") triple grouser with 1,450kg(3,200 lb) CWT

Load Point height m(ft)		Load radius								At max. reach		
		1.5m (5.0ft)		3.0m (10.0ft)		4.5m (15.0ft)		6.0m (20.0ft)		Capacity		Reach
												m (ft)
6.0m	kg					*1,770	*1,770			*1,820	1,710	5.62
20.0ft	lb					*3,900	*3,900			*4,010	3,770	(18.4)
4.5m	kg					*1,950	*1,950			1,610	1,180	6.62
15.0ft	lb					*4,300	*4,300			3,550	2,600	(21.7)
3.0m	kg			*3,160	*3,160	*2,410	2,390	1,870	1,380	1,350	970	7.10
10.0ft	lb			*6,970	*6,970	*5,310	5,270	4,120	3,040	2,980	2,140	(23.3)
1.5m	kg			*4,940	4,150	2,930	2,150	1,780	1,290	1,280	910	7.18
5.0ft	lb			*10,890	9,150	6,460	4,740	3,920	2,840	2,820	2,010	(23.6)
Ground Line	kg			5,490	3,800	2,740	1,980	1,700	1,220	1,360	960	6.89
	lb			12,100	8,380	6,040	4,370	3,750	2,690	3,000	2,120	(22.6)
-1.5m	kg	*6,090	*6,090	5,440	3,750	2,670	1,910			1,670	1,200	6.15
-5.0ft	lb	*13,430	*13,430	11,990	8,270	5,890	4,210			3,680	2,650	(20.2)
-3.0m	kg	*9,180	*9,180	*5,080	3,880	2,750	1,980					
-10.0ft	lb	*20,240	*20,240	*11,200	8,550	6,060	4,370					

• Boom: 4.3 m (14' 1") • Arm: 2.81 m (9' 3") • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe : 500mm(20") triple grouser with 1,450kg(3,200 lb) CWT

Load Point height m(ft)		Load radius								At max. reach		
		1.5m (5.0ft)		3.0m (10.0ft)		4.5m (15.0ft)		6.0m (20.0ft)		Capacity		Reach
												m (ft)
6.0m	kg									*1,570	1,290	6.66
20.0ft	lb									*3,640	2,840	(21.9)
4.5m	kg							*1,640	1,570	1,330	980	7.50
15.0ft	lb							*3,620	3,460	2,930	2,160	(24.6)
3.0m	kg					*1,920	*1,920	*1,830	1,500	1,160	830	7.92
10.0ft	lb					*4,230	*4,230	*4,030	3,310	2,560	1,830	(23.3)
1.5m	kg			*4,050	*4,050	*2,690	2,340	1,890	1,410	1,100	780	7.99
5.0ft	lb			*8,930	*8,930	*5,930	5,160	4,710	3,110	2,430	1,720	(26.2)
Ground Line	kg	*3,230	*3,230	*5,580	4,110	2,900	2,130	1,790	1,310	1,150	820	7.74
	lb	*7,120	*7,120	*12,300	9,060	6,390	4,700	3,950	2,890	2,540	1,810	(25.4)
-1.5m	kg	*4,960	*4,960	5,620	3,920	2,770	2,010	1,730	1,250	1,330	960	7.11
-5.0ft	lb	*10,930	*10,930	12,390	8,640	6,110	4,430	3,810	2,760	2,930	2,120	(23.2)
-3.0m	kg	*7,230	*7,230	5,630	3,930	2,760	2,000			1,830	1,350	5.96
-10.0ft	lb	*15,940	*15,940	12,410	8,660	6,080	4,410			4,030	2,980	(19.6)
-4.5m	kg			*4,480	4,100							
-15.0ft	lb			*9,880	9,040							

NOTES
1. Lifting capacity is 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 R110D-7A



Rating over-front













Rating over-side or 360 degree

• Boom: 4.3 m (14' 1") • Arm: 2.26 m (7' 5") • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe : 500mm(20") triple grouser with 1,450kg(3,200 lb) CWT

Load Point height m(ft)		Load radius								At max. reach		
		1.5m (5.0ft)		3.0m (10.0ft)		4.5m (15.0ft)		6.0m (20.0ft)		Capacity		Reach
												m (ft)
6.0m	kg					*1,750	*1,750			*1,750	*1,750	5.99
20.0ft	lb					*3,860	*3,860			*3,860	*3,860	(19.7)
4.5m	kg					*1,790	*1,790	*1,530	*1,530	1,650	1,340	6.92
15.0ft	lb					*3,950	*3,950	*3,370	*3,370	3,640	2,950	(22.7)
3.0m	kg			*2,820	*2,820	*2,270	*2,270	*2,060	1,710	1,420	1,140	7.38
10.0ft	lb			*6,220	*6,220	*5,000	*5,000	*4,540	3,770	3,130	2,510	(24.2)
1.5m	kg			*4,700	*4,700	*2,970	2,650	2,000	1,620	1,360	1,080	7.46
5.0ft	lb			*10,360	*10,360	*6,550	5,840	4,410	3,570	3,000	2,380	(24.5)
Ground Line	kg			*5,860	4,750	3,060	2,460	1,910	1,540	1,430	1,140	7.18
	lb			*12,920	10,470	6,750	5,420	4,210	3,400	3,150	2,510	(23.6)
-1.5m	kg	*5,580	*5,580	5,980	4,640	2,970	2,370	1,880	1,500	1,700	1,360	6.49
-5.0ft	lb	*12,300	*12,300	13,180	10,230	6,550	5,220	4,140	3,310	3,750	3,000	(21.3)
-3.0m	kg	*8,530	*8,530	*5,440	4,720	3,000	2,400			*2,270	2,050	5.17
-10.0ft	lb	*18,810	*18,810	*11,990	10,410	6,610	5,290			*5,000	4,520	(17.0)

• Boom: 4.3 m (14' 1") • Arm: 1.96 m (6' 5") • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe : 500mm(20") triple grouser with 1,450kg(3,200 lb) CWT

Load Point height m(ft)		Load radius								At max. reach		
		1.5m (5.0ft)		3.0m (10.0ft)		4.5m (15.0ft)		6.0m (20.0ft)		Capacity		Reach
												m (ft)
6.0m	kg					*1,770	*1,770			*1,820	*1,820	5.62
20.0ft	lb					*3,900	*3,900			*4,010	*4,010	(18.4)
4.5m	kg					*1,950	*1,950			1,750	1,420	6.62
15.0ft	lb					*4,300	*4,300			3,860	3,130	(21.7)
3.0m	kg			*3,160	*3,160	*2,410	*2,410	2,020	1,640	1,480	1,180	7.10
10.0ft	lb			*6,970	*6,970	*5,310	*5,310	4,450	3,620	3,260	2,600	(23.3)
1.5m	kg			*4,940	*4,940	*3,060	2,550	1,940	1,560	1,410	1,120	7.18
5.0ft	lb			*10,890	*10,890	*6,750	5,620	4,280	3,440	3,110	2,470	(23.6)
Ground Line	kg			*5,870	4,580	6,970	2,370	1,860	1,480	1,490	1,480	6.89
	lb			*12,940	10,100	6,550	5,220	4,100	3,260	3,280	2,600	(22.6)
-1.5m	kg	*6,090	*6,090	*5,860	4,540	2,900	2,310			1,820	1,460	6.15
-5.0ft	lb	*13,430	*13,430	*12,920	10,010	6,390	5,090			4,010	3,220	(20.2)
-3.0m	kg	*9,180	*9,180	*5,080	4,670	2,980	2,380					
-10.0ft	lb	*20,240	*20,240	*11,200	10,300	6,570	5,250					