

# 

Boom length	3,000 mi	m(9' 10")
Arm length	<b> </b>	1,900 mm(6' 3")
A Max. digging reach	6,150 mm(20' 2")	6,400 mm(21' 0")
A' Max. digging reach at ground	6,010 mm(19' 9")	6,270 mm(20' 7")
B Max. digging depth	3,820 mm(12' 6")	4,060 mm(13' 4")
B' Max. digging depth (8ft level)	3,420 mm(11' 3")	3,700 mm(12' 2")
C Max. vertical wall digging depth	3,200 mm(10' 6")	3,460 mm(11' 4")
D Max. digging height	5,780 mm(18' 12")	5,920 mm(19' 5")
E Max. dumping height	4,050 mm(13' 3")	4,180 mm(13' 9")
F Min. front radius	2,350 mm( 7' 9")	2,360 mm( 7' 9")

### **Standard Equipment**

### ISO standard cabin

- · Cabin ROPS(ISO 3471) FOPS(ISO 3449) TOPS(ISO 12117)
- · All-weather steel cab with all-around visibility
- Safety glass windows
  Sliding fold-in front window
- · Sliding side window
- · Lockable door

· Engine speed

· Accessory box & Ash-tray

## Heater & Defroster

- Centralized monitoring
- Gauges
   Fuel level gauge
   Engine coolant temperature gauge
- Warning
  Fuel level
  Engine oil pressure
  Engine coolant temperature
  Hyd. oil temperature
- Low battery
  Air cleaner closing
   Fuel prefilter

### Door and cab locks, one key

AM/FM radio and cassette
Two outside rear view mirrors

Fully adjustable suspension seat with seat belt Console box tilting system(LH.)

Four front working lights

Electric horn

Battery (1 x 12 V x 100 AH)

Battery master switch

12 volt power supply(DC-DC converter) Removable clean out screen for radiator

Automatic swing brake Removable reservoir tank Water separator, fuel line Counterweight (210 kg, 460 lb)

Mono boom (3.0 m, 9'10")
Arm (1.6 m, 5' 3")
Track shoes (400 mm, 15.7")

Track rail guard

### **Optional Equipment**

Beacon lamp
Piping kit ( breaker, etc)
Narrow bucket(0.07m², 0.09yd³)
Arm (1.9m)

Double acting piping kit(clamshell, etc)

Too

Accumulator, work equipment lowering Operat Electric transducer Mecha

Travel alarm

Rubber crawler (400mm, 16")

Tool kit Operator suit

Mechanical suspension seat with heater

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 are rounded off to nearest pounds or inches.







MINI CRAWLER EXCAVATOR Applied Tier 3 Engine

55-7A





# **Technology in Cab Design**

# **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.



### **Reliable Instrument Panel**

All information from the devices such as engine RPM, engine water temp., fuel status and the state of all types of electric switches provide the operator with an exact condition of machine.

These features make troubleshooting much easier.

M MODE: High power

# **Reliable Instrument Panel**











**Radio & Cassette Player** 

Deluxe radio & cassette player are located at convenient position.



**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.



### **High-output Air Conditioner & Heater**

Large capacity air conditioning system is installed for operator's comfort in all climate. For more convenience, the cab is equipped with defroster for the cold seasons.



### **Sensitive Joystick and Easy Entrance**

New joystick grips for precise control have been equipped with 4 switches. Tilting tower combined with large door provides more space for gateway.



Breaker/Dummy





Travel pedals and levers are equipped with ergonomically designed foot rests. It enables the operator to work easily and quickly.



### **Sliding Side Window**

The sliding side window provides more convenience for the operator without having to opening the door.



### **Big Sized Sun Visor & Top Glass**

The big sun visor and top glass are installed on the top of the front window to block direct operator. sunlight and increase operator's visibility.

Top Glass: Bronze color and laminated glass



### **Rise-up Wiper**

Rise-up wiper gives better front view to



### **Easy to Open Front Window**

Sliding fold-in front window is easily opened and safely maintained in open position to improve the working condition.



# Robex 55-7A





### **Exceptional Traction & Lifting Capacity**

The considerable traction and lifting capacity enable all work to be done quickly.



### **Reinforced Bucket**

The design includes bucket link durability and anti-wear characteristics with additional reinforcement plates on cutting edge section. Reinforced bucket is made with thicker steel and additional lateral plate.



### **Reinforced Arm**

Reinforcements are welded to protect the arm from impacts and wear.



### Gradeability

35 degree(70%) of high gradeability and long tumbler distance may be easier to work at



### **Anti Restart System**

The new system protects the starter from re- Switches and other essential controls are starting during engine operation, even if the operator accidentally turns the start key again.



### **Easy-to-Reach Control Panels**

located near the operator. This helps keep operator move-ment to a minimum, enhancing control with less operator fatigue.



### **Installation for Breaker Operation**

Overload relief value and pipes are installed as standard for customer's convenience.



### Offset Boom Swing

The R55-7A is designed for efficient work in congested residential and urban areas. The boom can be offset within a range of 130 degrees.





**Arrangement Between Bucket and** 

Attachment is designed to minimize dead space between bucket and blade for efficient grading work.



**Powerful Dozer Blade** 

Large size blade improves work efficiency and equipment durability.



**FEM(Finite Element Method)** 

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



**Tough, Durable Undercarriage** 

The R55-7A has an undercarriage constructed with tough, durable, robotically-welded steel. Tapered, upper roller side supports were installed to keep tracks properly aligned at all times.



**Steel Tube Frame Cabin** 

against falling objects, improves operator's safety with seat-belt in the event of roll-over. (ROPS, FOPS, TOPS STD.)



**Boom Cylinder Cover** 

Strong cabin structure protects the operator Boom cylinder cover is installed as standard



**Applied Side Protector** 

When the machine turns, the side protector prevents any damage to engine hood.



**Large Capacity Radiator** 

To improve the performance in oveload or continual work, large capacity radiator was installed.

# Robex 55-7A





**Easy Change of Air Cleaner** The R55-7A is fitted with durable plastic air cleaner for easy maintenance and quick



Easy to Fill up with Fuel (Option) The Fuel filler pump provide easy filling of fuel tank from other tanks by electric device.



High Capacity Prefilter & Fuel Filter To protect the injection system and minimize Grease fittings are highlighted and the risk of fuel breakdown, high capacity fuel centralized for fast access when doing your filter and prefilter are applied for durability.



**Centralized Grease Fittings** service checks. Save time and money during routine maintenance.



**Centralized Fuse Box** Fuse box is arranged on the rear of seat for easy service.



**Large Capacity Fuel Tank** The large capacity of fuel tank provides longer working time.



**Battery Master Switch** the discharge of battery.



Smooth and precise swing control The battery master switch enables checking  $\quad$  Shock absorbing design is more improved to and maintaining the battery while minimizing stop and start swing precisely and smoothly.

# **Specifications**



### **Engine**

Model		YANMAR 4TNV98-EPHYB			
Туре		Water cooled, 4 cycle diesel 4 cylinders in line, direct injection, low emission			
Rated flywheel ho	rse power				
SAE	J1995 (gross)	57 HP (42.5 kW) at 2,400 rpm			
SAE	J1349 (net)	55.2 HP (41.2 kW) at 2,400 rpm			
DIN	6271/1 (gross)	57.8 PS (42.5 kW) at 2,400 rpm			
טווע	6271/1 (net)	56 PS (41.2 kW) at 2,400 rpm			
Max. torque		20.5 kgf·m (148 lbf·ft) at 1,550 rpm			
Bore x stroke		98 mm (38.6") x 110 mm (4.33")			
Displacement		3,319 cc (203 cu in)			
Battery		1 x 12 V x 100 AH			
Starter motor		12V-3.0 kW			
Alternator		12V-80 A			

# Mydraulic System

Main pump						
Туре	1	Two variable displacement piston pumps				
Rated flow	2	2 x 55.2 1 /min(14.5 US gpm/12 UK gpm)pumps				
Sub-pump for pilot ci	rcuit (	Gear pump				
Hydraulic motors						
Travel		Two speed axial piston motor with counter balance valve and parking brake				
Swing	A	Axial piston motor with automatic brake				
Relief valve setting						
Implement circuits		220 kgf/cm² (3,130 psi)				
Travel circuit	2	220 kgf/cm² (3,130 psi)				
Swing circuit	2	220 kgf/cm² (3,060 psi)				
Pilot circuit	3	30 kgf/cm² ( 430 psi)				
Service valve	I	Installed				
Hydraulic cylinders						
	Boom	:	1 - 110 x 715 mm (4.3" x 28.1")			
No of ordinator	Arm	:	1 - 90 x 850 mm (3.5" x 33.5")			
No. of cylinder- hore x stroke	Bucket	:	1 - 80 x 660 mm (3.1" x 26.0")			
nois x 200ks	Boom sv	ving :	1 - 95 x 527 mm (3.7" x 20.7")			
	Dozer bl	ade :	1 - 110 x 214 mm (4.3" x 8.4")			

# Drives & Brakes

Drive method	Full hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	5,300 kgf (11,700 lbf)
Max. travel speed(high) / (low)	4.1 km/hr (2.5 mph) / 2.2 km/hr (1.4 mph)
Gradeability	35° (70%)
Parking brake	Multi-wet disc



### Swing System

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing brake	Multi wet disc
Swing speed	9.3 rpm



### **L** Controls

Pilot pressure-operated joysticks and pedals provide almost effortless and fatigueless operation.

Pilot control	Two joysticks with one safety lever (LH): Boom Swing and arm, (RH): Boom and bucket(ISO)
Traveling and steering	Two levers with pedals
External Lights	Two lights mounted on the boom one below the cab



### Coolant & Lubricant Capacity

(Refilling)	liter	US gal	UK gal
Fuel tank	120.0	31.7	26.4
Engine coolant	10.0	2.6	2.2
Engine oil	11.6	3.1	2.6
Swing device-gear oil	1.5	0.4	0.3
Final drive(each)	1.2	0.3	0.2
Hydraulic tank	70.0	18.5	15.4
Hydraulic system	120.0	31.7	26.4



### Undercarriage

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

Center frame	X - leg type
Track frame	Pentagonal box type
No. of shoes on each side	40
No. of track roller on each side	6



### Operating Weight (approximate)

Operating weight, including 3,000 mm (9' 10") boom, 1,600 mm (5'3") arm, SAE heaped 0.18 m3 (0.24 yd3) digging bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

Major component weight								
Upper structure	2,650 kg ( 5,840 lb)							
Counterweight	200 kg ( 440 lb)							
Mono boom(with arm cylinder)	310 kg ( 680 lb)							
Operating Weight								
Operating weight kg(lb)	5,450 (12,020)							

<sup>·</sup> Mono boom with blade



### Buckets

Сара	acity	Wi	dth		3.0m (9' 10") Boom	
SAE heaped	CECE Without heaped side cutters		With Weight side cutters		1.6m (5'3") arm	
0.07 m³ (0.09 yd³)	0.06 m³ (0.08 yd³)	315 mm(12.4")	360 mm(14.2")	84 kg(185 lb)	•	
* 0.18 m³ (0.24 yd³)	0.15 m³ (0.20 yd³)	670 mm(26.3")	735 mm(29.0")	137 kg(300 lb)	•	

<sup>\*:</sup> Standard digging bucket : Applicable for materials with density 1,600 kg/m³ (2,700 lb/yd³) or less : Applicable for materials with density 1,100 kg/m³ (1,850 lb/yd³) or less

Arm	Length	* 1,600 mm (5' 3")	1,900 mm (6' 3")		
AIIII	Weight	210 kg (460 lb)	230 kg (510 lb)		
		37.7 kN	37.7 kN		
	SAE	3,850 kgf	3,850 kgf		
Bucket digging		8,490 lbf	8,490 lbf		
force		42.4 kN	42.4 kN		
	ISO	4,330 kgf	4,330 kgf		
		9,550 lbf	9,550 lbf		
		28.4 kN	25.5 kN		
	SAE	2,900 kgf	2,600 kgf		
Arm crowd		6,390 lbf	5,730 lbf		
force		31.9 kN	28.7 kN		
	ISO	3,260 kgf	2,930 kgf		
		7,190 lbf	6,460 lbf		

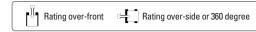




SAE heaped

0.07 m³ (0.09 yd³) \* 0.18 m³ (0.24 yd³)

### Lifting Capacities R55-7A



· Boom: 3.0m (9' 10") · Arm: 1.6 m (5' 3") · Bucket: 0.18m³ (0.24yd³) SAE heaped · Dozer blade down with 200kg (440 lb) counterweight.

				•								
		Load radius									At max. reach	
	point	2m (7ft)		2m (7ft) 3m (10ft)		4m (	4m (13ft)		5m (16ft)		Capacity	
	ight (ft)			Ţ.		rī-						m (ft)
5m (16ft)	kg Ib		 		 		 		 	*950 *2090	*950 *2090	4.12 (13.5)
4m (13ft)	kg Ib		 		 	*1020 *2250	*1020 *2250		 	*980 *2160	730 1610	5.07 (16.6)
3m (10ft)	kg Ib		 		 	*1090 *2400	1070 2360		 	880 1940	600 1320	5.59 (18.3)
2m (7ft)	kg Ib	*3060 *6750	*3060 *6750	*1690 *3730	1610 3550	*1330 *2930	1020 2250	1030 2270	710 1570	810 1790	550 1210	5.83 (19.1)
1m (3ft)	kg Ib		 	2230 4920	1490 3280	1420 3130	970 2140	1000 2200	680 1500	790 1740	540 1190	5.84 (19.2)
Ground Line	kg Ib	*2340 *5160	*2340 *5160	2160 4760	1430 3150	1380 3040	930 2050	990 2180	670 1480	840 1850	560 1230	5.62 (18.4)
-1m (-3ft)	kg Ib	*3600 *7940	2760 6080	2140 4720	1410 3110	1360 3000	920 2030			960 2120	650 1430	5.13 (16.8)
-2m (-7ft)	kg Ib	*3780 *8330	2800 6170	2160 4760	1430 3150		I I			*1150 *2540	900 1980	4.22 (13.8)
-3m (-10ft)	kg Ib	*2060 *4540	*2060 *4540		 		 		 			

· Boom: 3.0m (9' 10") · Arm: 1.9 m (6' 3") · Bucket: 0.18m³ (0.24yd³) SAE heaped · Dozer blade down with 200kg (440 lb) counterweight.

Load point height m(ft)		Load radius								At max. reach		
		2m (7ft)		3m (10ft)		4m (13ft)		5m (16ft)		Capacity		Reach
				Ů		<u> </u>						m (ft)
5m (16ft)	kg lb		 		 		 		 	*870 *1920	*870 *1920	4.56 (15.0)
4m (13ft)	kg Ib		 		 		 		 	*900 *1980	650 1430	5.89 (19.3)
3m (10ft)	kg lb		 		l I	*950 *2090	*950 *2090	*1000 *2200	730 1610	810 1790	550 1210	6.12 (20.1)
2m (7ft)	kg lb		 	*1450 *3200	*1450 *3200	*1200 *2650	1030 2270	1030 2270	710 1570	750 1650	500 1100	6.13 (20.1)
1m (3ft)	kg lb	*2090 *4610	*2090 *4610	*2170 *4780	1510 3330	1430 3150	980 2160	1000 2200	680 1500	730 1610	490 1080	5.92 (19.4)
Ground Line	kg lb	*2320 *5110	*2320 *5110	2160 4760	1430 3150	1380 3040	930 2050	980 2160	660 1460	770 1700	510 1120	5.46 (17.9)
-1m (-3ft)	kg lb	*3260 *7190	2720 6000	2120 4670	1400 3090	1350 2980	910 2010	970 2140	650 1430	860 1900	580 1280	4.65 (15.3)
-2m (-7ft)	kg lb	*4150 *9150	2760 6080	2130 4700	1400 3090	1360 3000	910 2010		 	1120 2470	760 1680	
-3m (-10ft)	kg lb	*2770 *6110	*2770 *6110	*1650 *3640	1460 3220		 		 		! ! !	

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 4. (\*) indicates load limited by hydraulic capacity. 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.