

Building a better future
Global Leader

55W-7



NEW

7 SERIES MINI EXCAVATOR

Yanmar 4TNV94L Engine	42kW/57HP
Operating weight	5,450kg (12,020 lb)
Bucket capacity, SAE	0.07~0.18m ³ (0.09~0.24yd ³)



■ Photo may include optional equipment.

HYUNDAI
HEAVY INDUSTRIES CO., LTD.

Hyundai Robex 55W-7

- M**aximized Workability
- C**omfortable Operating Environment
- A**dvanced Hydraulic System
- E**nhanced Durability & Reliability
- I**mproved Fuel Efficiency

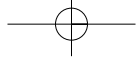
The Highest Engine Power in its Class

YANMAR 4TNV94L Tier II

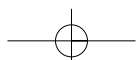
57 HP / 2,400 rpm

Yanmar 4TNV94L engine provides 20.6 kgf-m (149 lb-ft) of maximum torque with 57 HP at 2,400rpm of rated power. This means the R55W-7 runs with the most power in its class, giving you more power to get the job done.





■ Photo may include optional equipment.



Technology in Cab Design

Wide Comfortable Operating Space

All 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 cabin display 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.

Various Storage Spaces Inside Cabin



Radio & Cassette Player

Deluxe radio & cassette player are located at a convenient position.



Convenient and Comfortable Space



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.



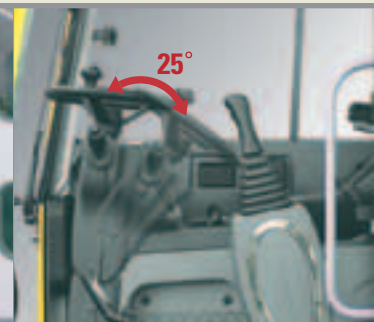
High-output Air Conditioner & Heater

Large capacity air conditioning system is installed for operator's comfort in all climates. For more convenience, the cab is equipped with a defroster in case of cold weather.



Semi Long Joystick on Tilting Tower

Semi long joystick provides precise and convenient control. Tilting tower combined with large door provides more space to enter the cabin.



Adjustable Steering Column

Steering column is adjustable to obtain optimal position for various operator's body sizes and operating ways.



Sliding Side Window

Sliding window enables operator to communicate outside and air to circulate without having to open main door.



Sun Visor & Top Glass

Glass on top front corner is large enough to give better visibility while sun visor protects operator from exposing to direct sunlight.

■ Top Glass : Bronze color and laminated glass



Rise-up Wiper

Rise-up wiper gives better front view to operator during rainy weather conditions.



Easy to Open Front Window

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



Performance and Durability



Arrangement Between Bucket and Blade

Boom-arm-bucket kinematics is designed to minimize dead space between bucket and blade during efficient grading work.



Exceptional Traction and Lifting Capacity

Considerable traction and lifting force enables fast work.



FEM(Finite Element Method)

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



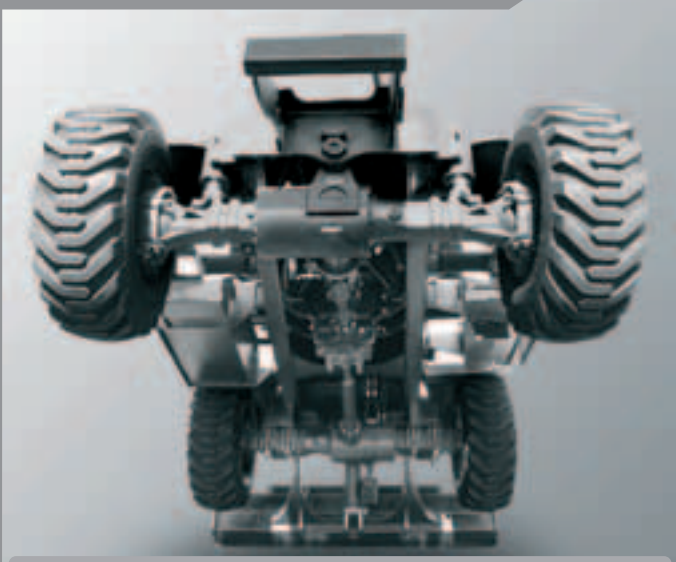
Side protector

A protector at both corners adds safety to engine hood when machine is turned.



Higher Performance and Durability

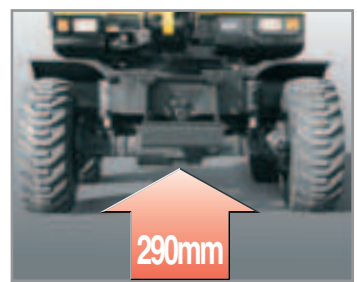
Strong and Stable Lower Frame



Welded reinforced box-section frame using low-stress and high-strength steel.

Better Ground Clearance

Better ground clearance increases safety on rough terrain.



Rectangular Tube Cabin

Certified cabin for ROPS, FOPS, and TOPS increases safety of operator in case external force is exerted on cabin.



Gradeability

35 degrees(70%) of high gradeability and long tumbler distance make machine work much better at slope area.



Breaker Piping

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



Offset Boom Swing

The R55W-7 is designed for efficient work in congested residential and urban areas. The boom can be offset within a range of 130 degrees.



Reliability and Serviceability



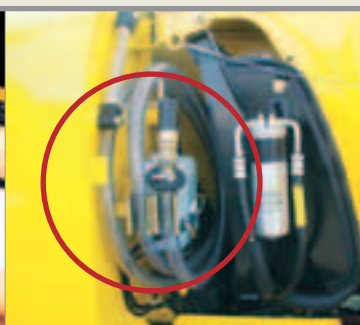
Easy to Maintain Engine Components

The R55W-7 is designed with accessibility in mind. All doors, covers and hoods are built for complete open access. You'll find that the R55W-7 offers plenty of space to complete your regular maintenance and service hassle-free.



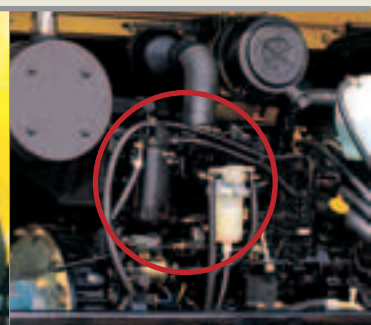
Easy Change of Air Cleaner

The R55W-7 is fitted with durable plastic air cleaner for easy maintenance and quick service.



Fuel Filler Pump

Electric fuel filler pump to facilitate fuel filling of the machine.



High Capacity Water Separator & Fuel Filter

To protect the injection system and minimize the risk of fuel breakdown, high capacity fuel filter and transparent water separator are applied for durability.

Reliability and Serviceability

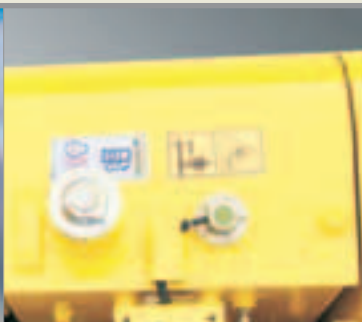


■ Photo may include optional equipment.



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 battery master switch enables checking and maintaining the battery while minimizing the discharge of battery.



Smooth and precise swing control

Shock absorbing design is more improved to stop and start swing precisely and smoothly.

Specifications

Engine

Model		Yanmar 4TNV-94L	
Type		Water cooled, 4 cycle Diesel 4 cylinders in line, direct injection, low emission	
Rated flywheel horse power	SAE	J1995 (gross)	57 HP (42 kW) at 2400 rpm
		J1349 (net)	55 HP (41 kW) at 2400 rpm
horse power	DIN	6271/1 (gross)	57.7 PS (42 kW) at 2400 rpm
		6271/1 (net)	56 PS (41 kW) at 2400 rpm
Max. torque		20.6 kgf·m (149 lbf·ft) at 1440 rpm	
Bore x stroke		94 mm (3.70") x 110 mm (4.33")	
Displacement		3054 cc (186 cu in)	
Battery		1 x 12 V x 100 AH	
Starter motor		12V-3.0 kW	
Alternator		12V-55 Amp	

Hydraulic System

Main pump	
Type	Two variable displacement piston pumps
Rated flow	2 x 60 ℓ/min(15.9 US gpm/13.2 UK gpm)
Sub-pump for pilot circuit	Gear pump
Hydraulic motors	
Travel	Two speed axial piston motor with counter balance valve and parking brake
Swing	Axial piston motor with automatic brake
Relief valve setting	
Implement circuits	220 kgf/cm ² (3130 psi)
Travel circuit	220 kgf/cm ² (3130 psi)
Swing circuit	200 kgf/cm ² (2840 psi)
Pilot circuit	30 kgf/cm ² (430 psi)
Service valve	Installed
Hydraulic cylinders	
No. of cylinder- bore x rod x stroke	Boom : 1 - 110 x 65 x 715 mm (4.3" x 2.6" x 28.1")
	Arm : 1 - 90 x 55 x 850 mm (3.5" x 2.2" x 33.5")
	Bucket : 1 - 80 x 50 x 660 mm (3.1" x 2.0" x 26.0")
	Boom swing : 1 - 95 x 50 x 527 mm (3.7" x 2.0" x 20.7")
	Dozer blade : 1 - 100 x 50 x 159 mm (4.3" x 2.0" x 7.5")

Drives & Brakes

4-wheel hydrostatic drive, mesh, helical gear transmission provides 2 forward and reverse travel speeds.

Max. travel speed	27 km/h
Gradeability	35° (70%)

Swing System

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing circuit lubrication	Grease
Swing brake	Multi wet disc
Swing speed	9.9 rpm

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	Pedal and steering wheel
Engine throttle	Mechanical, cable type
External Lights	Two lights mounted on the boom one below the cab

Coolant & Lubricant Capacity

(refilling)	liter	US gal	UK gal
Fuel tank	120	31.7	26.4
Engine coolant	10.0	2.6	2.2
Engine oil	9.2	2.4	2.0
Swing device-gear oil	1.5	0.4	0.3
Hydraulic tank	70.0	18.5	15.4
Axle(Front/Rear)	5.7 / 4.6	1.5 / 1.2	1.3 / 1.0

Axles & Wheels

Full floating front axle is supported by center pin for oscillation. It can be locked by oscillation lock cylinders. Rear axle is fixed on the lower chassis
Tires : 12.0 x 16.5-12PR, single

Dozer Blade

Pin-on type dozer blade is standard. Dozer blade is a very useful addition for leveling and back filling or clean-up work.

Dozer blade	Width x Height1925 x 354mm(6' 4" x 14") Max. lifting above ground level.....400mm(15.7") Max. depth below ground level.....90mm(3.5")
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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)
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- Mono boom with blade

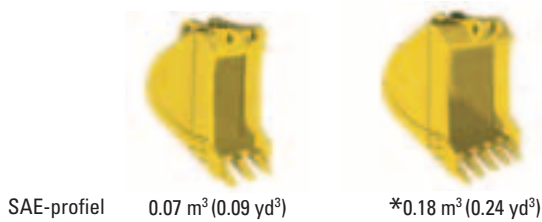


Buckets

Capacity		Width		Weight	3.0m (9' 10") Boom	
SAE heaped	CECE heaped	Without side cutters	With side cutters		1.6m (5' 3") arm	1.9m (6' 3") arm
0.07 m ³ (0.09 yd ³)	0.06 m ³ (0.08 yd ³)	315 mm (12.4")	360 mm (14.2")	84 kg (185 lb)	■	■
*0.18 m ³ (0.24 yd ³)	0.15 m ³ (0.20 yd ³)	705 mm (27.8")	770 mm (30.3")	137 kg (300 lb)	■	▲

* : 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



SAE-profiel

0.07 m³ (0.09 yd³)

*0.18 m³ (0.24 yd³)

Arm	Length	* 1,600 mm (5' 3")	1,900 mm (6' 3")
		Weight	Weight
Bucket digging force	SAE	37.7 kN	37.7 kN
		3850 kgf	3850 kgf
	ISO	8490 lbf	8490 lbf
		42.4 kN	42.4 kN
Arm crowd force	SAE	4330 kgf	4330 kgf
		9550 lbf	9550 lbf
	ISO	28.4 kN	25.5 kN
		2900 kgf	2600 kgf
ISO	6390 lbf	5730 lbf	
	31.9 kN	28.7 kN	
ISO	3260 kgf	2930 kgf	
	7190 lbf	6460 lbf	

* : Standard Arm(Arm weight including cylinder and linkage)



Lifting Capacities R55W-7

Rating over-front Rating over-side or 360 degree

• 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 point height m (ft)		Load radius								At max. reach		
		2.0m(5ft)		3.0m(10ft)		4.0m(13.12ft)		5.0m(16.40ft)		Capacity	Reach	
												m (ft)
5.0m (16.40ft)	kg									*960	*960	4.46
	lb									*2120	*2120	(14.6)
4.0m (13.12ft)	kg					*1020	*1020			*990	720	5.26
	lb					*2250	*2250			*2180	1590	(17.3)
3.0m (10ft)	kg					*1150	1110			*1030	610	5.69
	lb					*2540	2450			*2270	1340	(18.7)
2.0m (5ft)	kg			*1910	1670	*1410	1060	*1210	740	*1070	570	5.86
	lb			*4210	3680	*3110	2340	*2670	1630	*2360	1260	(19.2)
1.0m (5ft)	kg			*2510	1570	*1670	1010	*1320	720	*1120	570	5.80
	lb			*5530	3460	*3680	2230	*2910	1590	*2470	1260	(19.0)
Ground Line	kg	*2680	*2680	*2730	1510	*1820	980			*1160	610	5.51
	lb	*5910	*5910	*6020	3330	*4010	2160			*2560	1340	(18.1)
-1.0m (-5ft)	kg	*4040	3020	*2620	1510	*1770	970			*1190	740	4.91
	lb	*8910	6660	*5780	3330	*3900	2140			*2620	1630	(16.1)
-2.0m (-5ft)	kg	*3410	3080	*2100	1540							
	lb	*7520	6790	*4630	3400							

• 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		
		2.0m(5ft)		3.0m(10ft)		4.0m(13.12ft)		5.0m(16.40ft)		Capacity	Reach	
												m (ft)
5.0m (16.40ft)	kg					*940	*940			*880	840	4.86
	lb					*2070	*2070			*1940	1850	(15.9)
4.0m (13.12ft)	kg									*910	650	5.58
	lb									*2010	1430	(18.3)
3.0m (10ft)	kg					*1010	*1010	*1010	760	*950	560	5.98
	lb					*2230	*2230	*2230	1680	*2090	1230	(19.6)
2.0m (5ft)	kg	*3010	*3010	*1660	*1660	*1290	1070	*1130	740	*990	520	6.14
	lb	*6640	*6640	*3660	*3660	*2840	2360	*2490	1630	*2180	1150	(20.1)
1.0m (5ft)	kg	*1980	*1980	*2340	1580	*1580	1020	*1260	710	*1040	520	6.09
	lb	*4370	*4370	*5160	3480	*3480	2250	*2780	1570	*2290	1150	(20.0)
Ground Line	kg	*2560	*2560	*2680	1510	*1780	980	*1340	690	*1080	560	5.81
	lb	*5640	*5640	*5910	3330	*3920	2160	*2950	1520	*2380	1230	(19.1)
-1.0m (-5ft)	kg	*3610	2980	*2670	1490	*1800	960			*1120	650	5.27
	lb	*7960	6570	*5890	3280	*3970	2120			*2470	1430	(17.3)
-2.0m (-5ft)	kg	*3850	3030	*2300	1510	*1500	970			*1100	910	4.31
	lb	*8490	6680	*5070	3330	*3310	2140			*2430	2010	(14.1)
-3.0m (-10ft)	kg	*2080	*2080									
	lb	*4590	*4590									

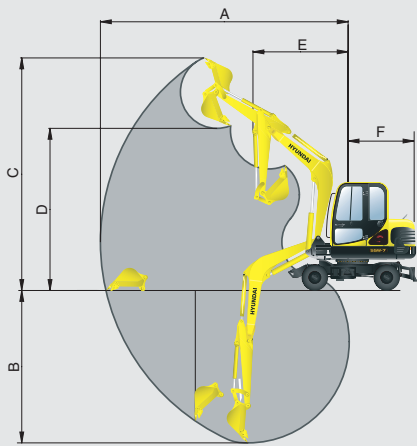
NOTES 1. Lifting capacity is based on SAE J1097, ISO 10567.

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.

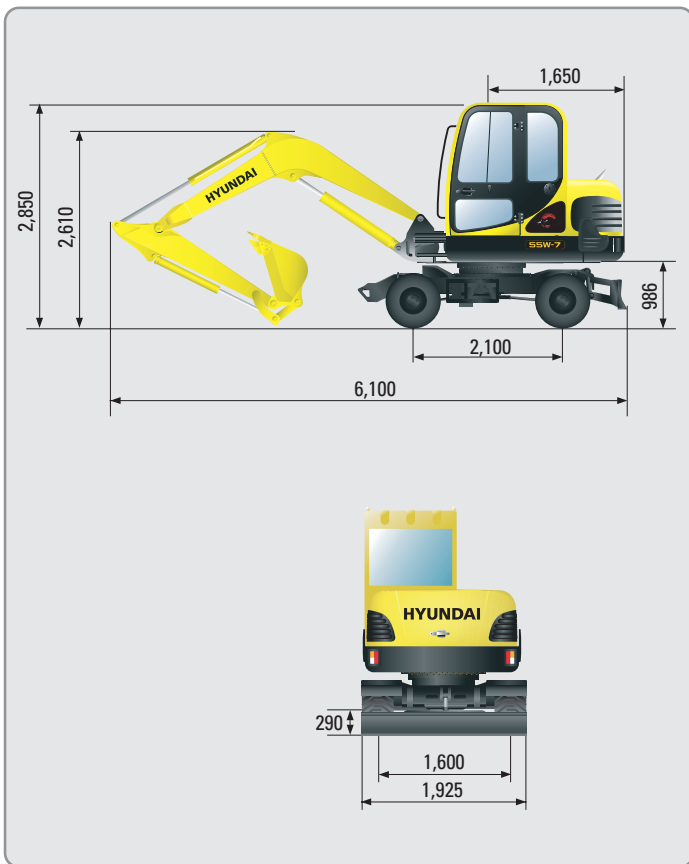
4. (*) indicates load limited by hydraulic capacity.

Working ranges



	3,000 mm(9' 10")	
	※1,600 mm(5' 3")	1,900 mm(6' 3")
A Max. digging reach	6,150 mm(20' 2")	6,430 mm(21' 1")
B Max. digging depth	3,500 mm(11' 6")	3,800 mm(12' 6")
C Max. digging height	6,070 mm(19' 11")	6,260 mm(20' 6")
D Max. dumping height	4,340 mm(14' 3")	4,530 mm(14' 10")
E Min. swing radius	2,350 mm(7' 9")	2,350 mm(7' 9")
F Tail swing radius	1,650 mm(5' 5")	1,650 mm(5' 5")

Dimensions



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
- Rise-up type windshield wiper
- Sliding fold-in front window
- Sliding side window
- Lockable door
- Accessory box & Ash-tray

Auto warm up system

Auto overheat prevention system

Heater & Defroster

Self diagnostic system

Centralized monitoring

- Service meter
- Clock
- Gauges
 - Fuel level gauge
 - Engine coolant temperature gauge
 - Engine speed
- Warning
 - Overheat warning
 - Fuel low level warning
 - Engine oil pressure warning

Hyd. oil temperature warning

Battery charging warning

Air cleaner clogging

• Indicate

Warming up

Preheat

Travel speed low

Travel speed high

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(L.H.)

Three front working lights

Electric horn

Battery (1 x 12 V x 100 AH)

Battery master switch

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")

Tires (12.0 x 16.5 - 12PR)

Blade (1925 x 354mm, 6' 4" x 14")

Starting Aid(air grid heater), cold weather

Optional Equipment

Air-conditioner(4000 kcal/hr, 16000BTU/hr)

Beacon lamp

Fuel filler pump(35 ℓ/min, 9.2 US gpm)

Safety lock valve for boom cylinder

Safety lock valve for arm cylinder

Single acting piping kit(breaker, etc)

Double acting piping kit(clamshell, etc)

Accumulator, work equipment lowering

12volt power supply(DC-DC converter)

Electric transducer

Quick coupler

Long arm (1.9m, 6' 3")

Narrow bucket(0.07m³, 0.09yd³)

Tool kit

Operator suit

Machine specification may vary by region. Specification is subject to change without notice.



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