

R140LC-9 **SMART**

OPERATING WEIGHT: 13790 kgs

GROSS POWER : 105 HP @ 2200 rpm

BUCKET CAPACITY: 0.65 - 0.72m³



R140LC-9 **SMART**

BEST-IN CLASS PERFORMANCE

- Advanced CAPO system
- Hydraulic flow summation
- Regeneration system
- Excellent digging forces



OPERATOR COMFORT

- Spacious cabin
- Fully adjustable seat
- Enhanced visibility
- User friendly functionality



IMPROVED FUEL EFFICIENCY

- Electro hydraulic control system
- One touch deceleration
- Auto deceleration system
- Efficient breaker mode



DESIGNED FOR SMART WORK



Increased Machine Durability

- Strengthened undercarriage
- Proven upper structure
- Durable components
- Reinforced front attachment



Simplified Maintenance

- Easy serviceability
- Extended maintenance
- Large capacity fluid tank
- Low life cycle cost



Parts & Support

- Hyundai genuine parts
- Max parts availability
- On-site product support
- Remote Management System (Hi-Track)



Performance

USER ADVANTAGES

Lower fuel and oil consumption as compared to other engines in this class.

Components like fuel pump, lube oil and lube oil filters on one side of the machine helps for easy maintenance.

Highly acceptable Hyundai engine with easy parts availability.



ENGINE

The four cylinder, turbocharged, water cooled diesel engine is built for heavy operation, maximum economy & reliability. The power units are produced to meet the high precision and quality standards.



R140LC-9 **SMART**



HYDRAULIC SYSTEM

Hydraulic pressure sensing system provides wide range of flow at various workloads. Open center Main Control Valve (MCV) ensures faster response and maximum efficiency. Travel & swing motor provides excellent mobility and faster cycle time.

CHOICE OF OPERATING MODE

Working Mode	Advantage
P Mode	<ul style="list-style-type: none">• Uses 100% engine power for mass production
S Mode	<ul style="list-style-type: none">• Uses 85% engine power for all work
E Mode	<ul style="list-style-type: none">• Uses 70% of engine power for reduced fuel consumption
Breaker Mode	<ul style="list-style-type: none">• Sets pump flow to optimal level and boosts efficiency



POWER BOOST SYSTEM

Increased digging forces by 10% than normal system pressure for short duration.

SWING PRIORITY

- Boost higher hydraulic flow to swing system
- Improved cycle time.

EXCELLENT DIGGING FORCES

Higher output even in tough working condition

- **Bucket - 11290 kgf**
- **Arm - 8580 kgf**



REDESIGNED MCV

- Redesigned wider oil galleries
- Quick response and better power output



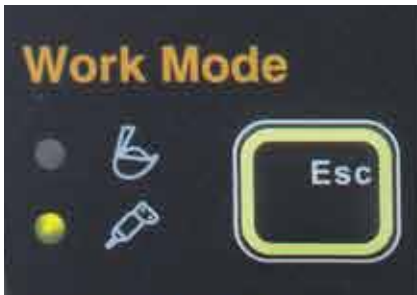


Fuel Efficiency



IMPROVED FUEL EFFICIENCY

New MCV, Improved MCU with auto deceleration function, Advanced CAPO system, Power & working mode options results in excellent fuel efficiency.



EXCLUSIVE BREAKER MODE

Excellent fuel saving due to exclusive power for breaker operation



ONE TOUCH IDLE & AUTO DECELERATION

Prevents fuel losses by reducing engine rpm during no-load condition



ARM REGENERATION SYSTEM

- Smooth operation
- Prevent cavitation
- Increased performance & fuel efficiency

PUMP FLOW CONTROL SYSTEM

Reduced pump flow during machine idle condition to minimize power loss.





Operator Comfort

COMFORTABLE OPERATOR ENVIRONMENT

The ergonomically placed control levers and seat can be adjusted to provide maximum operator comfort.

The seat is fully adjustable for optimum operating position, reducing operator fatigue.

360 degree visibility for better and safe operations.



AIR CONDITIONING SYSTEM

- 9 air ducts
- Advanced AC console
- Allaround air circulation

Operator comfort results in increased productivity

OTHER FEATURES



MP3/USB PLAYER WITH REMOTE



SUNROOF WITH HINGED COVER



MULTI ADJUSTMENT SEAT



10 STAGE RPM DIAL



CABIN TOP LIGHT



SMOOTH TRAVEL PEDAL

INSTRUMENT PANEL

The display shows hydraulic oil temperature, fuel level, Engine oil temperature and 12 warning indicators. Facilitate diagnostic checks & maintenance management to optimize productivity needs ensuring fuel efficiency.



Reliability

STRONG & STABLE LOWER FRAME

Use of specialized advance steel plates and reinforced design for higher strength and durability.



RUGGED UNDERCARRIAGE

X frame provides excellent resistance to torsional bending to enhance structure life



RELIABLE ELECTRICALS

- Dust and water proof connectors
- Longer component life



RELIABLE COMPONENTS

Swing system and travel system exclusively designed by Hyundai ensuring reliable performance.



HD FRONT STRUCTURE

- Thicker plates
- Casted component
- Internal baffle plate
- Added wear plates on arm
- Reinforced bucket



REINFORCED IDLER GUIDE AREA



REINFORCED BUCKET



BELLY GUARD



TRACK LINKS



Serviceability

EASY ACCESSIBILITY

Easy access for maintenance means regular checks get done faster. Hyundai's SMART machines feature easy service access to increase uptime to reduce operating costs.

LEADING SERVICE INTERVAL

More efficient cooling system which extend service intervals, minimize operating cost and reduce machine down time.

CHANGE INTERVAL	
Hydraulic oil	5000 hrs
Hydraulic filter	1000 hrs
Engine oil	500 hrs
Engine Filter	500 hrs

MAINTENANCE MANAGEMENT



SELF DIAGNOSTIC SYSTEM



LARGE LCD MONITOR

Operator can check the machine's vital signs without any difficulties

- **Maintenance Management**
Proactive maintenance
- **Self Diagnostic**
Reduces down time
- **Warning Indicator**
Ensures safe working

FUEL FILLER PUMP (OPTIONAL)

- Ensuring clean fuel to the engine
- Avoids fuel contamination from air

EASY ENGINE MAINTAINENCE

- Cooling and pre-heating systems provides optimal and immediate operation
- Longer engine & hydraulic component life
- Servicing the engine and the hydraulics has been considerably simplified





Safety

SAFETY - PEACE OF MIND AND OPERATOR CONFIDENCE

Cabin is integrally welded with high strength steel to provide enhanced protection. Handrails and steps are provided for easy operation. Anti-slip pads provide safety against skidding while climbing machine.



COUNTER BALANCE VALVE

Works as a hydrostatic brake and prevents machine against accidental roll down in steep gradients.



BOOM & ARM HOLDING SYSTEM

Prevent attachments from drifting against gravity due to prolonged overhanging.



ANTI RESTART FUNCTION

Prevents starter from damage during engine operation



AUTO ENGINE OVERHEAT PREVENTION



BATTERY DISCONNECT SWITCH



AIR BREATHER GUARD



UPPER UNDER COVER



Parts & Support

HYUNDAI GENUINE PARTS

Developed in synergy with our machines, Hyundai parts and lubricants ensure that you get the high levels of performance, reliability and safety that come with the complete Hyundai experience.

Enjoy the confidence and assurance of the most stringent testing procedures and the high quality manufacturing processes safeguarding your machine's health. Experience the versatility of our 200+ strong outlet network across India

WHY RISK IT?

Maximize profits and extend your machine's life.



BENEFITS OF USING GENUINE HYUNDAI PARTS AND LUBRICANTS

- Genuine Hyundai Parts meet strict specifications and standards in Chemistry, Microstructure and Tensile Strength.
- Benefit from the continuous improvements and advancements made by Hyundai's technical team
- Improved performance of hydraulics and engine components
- Enjoy greater productivity with higher uptime
- Higher resale values
- Reduced oil consumption and unexpected breakdowns
- Enhanced component life



Our unique remote management system allows customers to access machine operating information & obtain service & maintenance alerts at the touch of a button



INCREASED PRODUCTIVITY

Remote management system empowers you to enhance the efficiency of your operations. Make better decision by comparing the machine's operating time with its travelling idling & breaker use duration.

CONVENIENT & EASY MONITORING

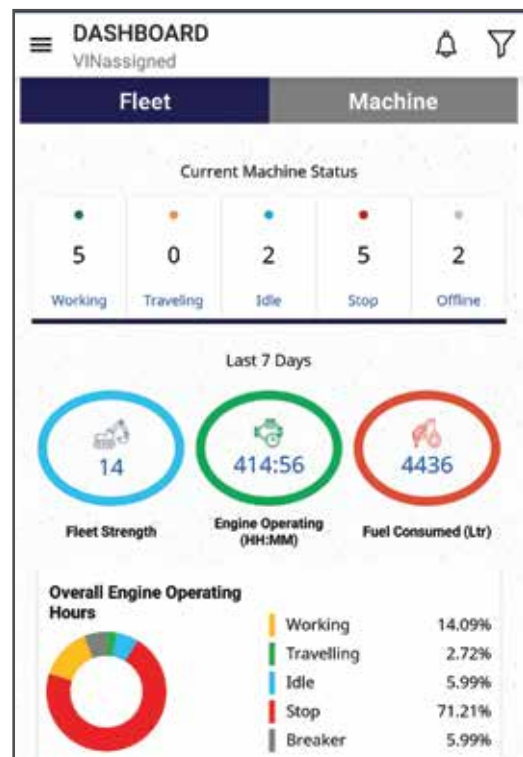
Enjoy round the clock and on the move access to your machine information through the website or mobile app.



PROACTIVE MAINTENANCE

Access your machines service & maintenance history with the utmost convenience. Plan your service schedules intelligently with our regular reminders.

SELECT REPORTS	
Geo Zone In/Out Detail	<input checked="" type="radio"/>
Fault Code	<input type="radio"/>
Vehicle Usage Summary	<input type="radio"/>
Temperature Record	<input type="radio"/>



ALARMS

Get notified of system alarms & protect your machine from critical faults & experience repairs.

SECURITY & FLEET MONITORING

Protect your machine from theft or unauthorized use. GPS features allows you to create a geo-fence & alerts you if the machine moves out of the defined boundary.



Specifications

Specifications

Engine

Maker/Model		Kirloskar4R1040T	
Rated flywheel horse power	ISO3046 (Gross)	105HP@ 2200rpm	
Max Torque		37.5@ 1500rpm	

Hydraulic System

Main pump	
Type	Two variable displacement piston pumps
Max. flow	2x130 lpm
Sub-pump for pilot circuit	Gear pump
Cross-sensing & 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 settings

Implement Circuit	350kgf/cm ²
Travel	350kgf/cm ²
Power Boost	380kgf/cm ²
Swing Circuit	285kgf/cm ²
Pilot Circuit	40kgf/cm ²
Service valve	Installed

Coolant & Lubricant Capacity

REFILLING	LITER
Fuel tank	270
Engine coolant	15.5
Engine oil	11.5
Swing device	2.5
Final drive (each)	3
Hydraulic system / Hydraulic tank	210 / 124

Drives & Brakes

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor in-shoe design
Reduction system	Planetary reduction gear
Traction Force	13256.3kgf (130KN)
Max.travel speed (high/low)	5.5kmph/3.2kmph
Gradeability	35 Degree (70%)
Parking brake	Multi wet disc

Undercarriage

X-Leg type centre frame is integrally welded with reinforced box section track frames. The under carriage includes lubricated rollers, idlers, track adjusters with shock absorbing spring and sprockets and trackchain with triple grouse shoes.

Centre frame	X-leg type
Track frame	Pentagonal box type
No. of shoes on each side	46
No. of carrier rollers each side	1
No. of track rollers. each side	7
No. of rail guard each side	1

Swing System

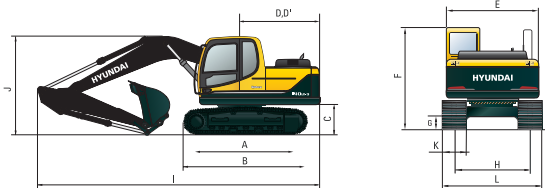
Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease bathed
Swing brake	Multi wet disc
Swing speed	12.0 rpm

Operating Weight

Shoe Width mm (in)	Operating weight kg (lb)	Ground pressure kgf/cm ² (psi)
500 mm (20")	13,790 (30,402)	0.35 (4.98)

Dimensions

(mm)

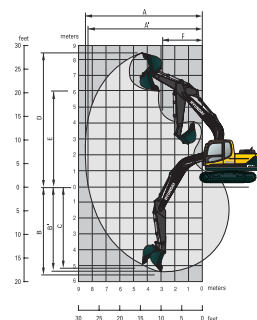


A	Tumbler distance	3000
B	Overall distance of crawler	3750
C	Ground clearance counter weight	940
D	Tail swing radius	2330
D'	Rear end length	2330
E	Overall width of upper structure	2600
F	Overall weight of the cab.	2860
G	Min. ground clearance	440
H	Track Gauge	2000
I	Overall length	7850
J	Overall height of boom	2760
K	Track shoe width	500/ 600 (Optional)
L	Overall width	2500 (2600)

Working Ranges (mm)

Arm length (std.)	*2100	2500	Boom length (std.)	4600
-------------------	-------	------	--------------------	------

A	Maximum Digging Reach	7920	8330
A'	Digging Reach on Ground	7770	8180
B	Max Digging Depth	5150	5550
B'	Max- Digging Depth (8' level)	4900	5340
C	Vertical Digging Depth	4900	5330
D	Maximum Digging Height	8100	8300
E	Maximum Dumping Height	5750	6060
F	Minimum Swing Radius	2670	2650
	Arm Crowd Force	7900 (8580)*	6700 (7270)*
	Bucket Digging Force	10400 (*11290) kgf	



*Power Boost



Lifting Capacities

LIFTING CAPACITIES R140LC-9 SMART



Rating over-front



Rating over-side

<ul style="list-style-type: none"> • Boom: 4.6m (15' 1") • Arm: 2.10m (6' 11") • Bucket: 0.65m³ • Shoe: 500mm (24") triple grouser with 1900kg (4190lb) Counterweight 												
Load point height m (ft)		Load radius								At max. reach		
		1.5 m (5.0 ft)		3 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20 ft)		Capacity		Reach
												m (ft)
6.0m (20ft)	kg					*3090	*3090			*3030		6.17
	lb					*6810	*6810			*6680		(20.2)
4.5m (15.0ft)	kg					*3340	*3340	*2900	2240	2700	1680	7.09
	lb					*7360	*7360	*6390	4940	5950	3700	(23.3)
3.0m (10.0ft)	kg			*5810	*5810	*4230	3530	3490	2170	2380	1450	7.54
	lb			*12810	*12810	*9330	7780	7690	4780	5250	3200	(24.7)
1.5m (5.0ft)	kg			*8760	6090	*5340	3270	3370	2070	2290	1380	7.62
	lb			*19310	13430	*11770	7210	7430	4560	5050	3040	(25.0)
Ground Line	kg			*8470	5770	5180	3080	3280	1980	2400	1440	7.35
	lb			*18670	12720	11420	6790	7230	4730	5290	3170	(24.1)
-1.5m (-5.0ft)	kg	*6370	*6370	*9780	5740	5110	3010	3250	1950	2800	1700	6.68
	lb	*14040	*14040	*21560	12650	11270	6640	7170	4300	6170	3750	(21.9)
-3.0m (-10.0ft)	kg	*10300	*10300	*8590	5850	5160	3060			3700	2430	5.41
	lb	*22710	*22710	*18920	12900	11380	6750			8160	5360	(17.7)

<ul style="list-style-type: none"> • Boom: 4.6m (15' 1") • Arm: 2.50m (8' 2") • Shoe: 600mm triple grouser 												
Load point height m (ft)		Load radius								At max. reach		
		1.5 m (5.0 ft)		3 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20 ft)		Capacity		Reach
												m (ft)
6.0m (20ft)	kg									*2810	1920	6.69
	lb									*6190	4230	(21.9)
4.5m (15.0ft)	kg							*2770	2270	2440	1500	7.53
	lb							*6110	5000	5380	3310	(24.7)
3.0m (10.0ft)	kg			*4930	*4930	*3830	3570	*3380	2190	2170	1310	7.95
	lb			*10870	*10870	*8440	7870	*7450	4830	4780	2890	(26.1)
1.5m (5.0ft)	kg			*8030	6240	*5010	3300	3380	2070	2100	1250	8.03
	lb			*17700	13760	*11050	7280	7450	4560	4630	2760	(26.3)
Ground Line	kg			*8780	5800	5200	3090	3270	1970	2180	1300	7.77
	lb			*19360	12790	11460	6810	7210	4340	4810	2870	(25.5)
-1.5m (-5.0ft)	kg	*5740	*5740	*9910	5700	5080	2990	3220	1920	2500	1500	7.15
	lb	*12650	*12650	*21850	12570	11200	6590	7100	4230	5510	3310	(23.5)
-3.0m (-10.0ft)	kg	*8760	*8760	*9040	5770	5100	3000			3340	2030	6.01
	lb	*19310	*19310	*19930	12720	11240	6610			7360	4480	(19.7)
4.5m (15.0ft)	kg			*6590	6030							
	lb			*14530	13290							

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

2. Lifting capacity of the Robex Series does not exceed 75% of the 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 the load limited by hydraulic capacity.

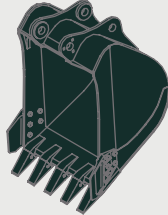


Specifications

BUCKETS

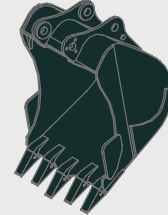
All buckets are welded with high-strength steel.

GENERAL PURPOSE



0.72m³SAE heaped bucket

HEAVY DUTY



*0.65m³SAE heaped bucket

Capacity m ³ (yd ³)		Width mm (in)		Weight. kg (lb)	Recommendation mm (ft -in)
SAE heaped	CECE heaped	Without side cutters	With side cutters		4.6m (15' 1") Boom
*0.72m ³ (0.93yd ³)	0.60m ³ (0.78yd ³)	1205mm(47.4")	1305mm (51.4")	551 (1215)	■
◎0.65m ³ (0.85yd ³)	0.55m ³ (0.72yd ³)	1110mm(43.7")	1210mm (47.6")	555 (1224)	▲

* : Standard GP bucket
 ◎ : Heavy Duty bucket

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

ATTACHMENT

Boom and arm are welded with a low-stress, full-box section design. 4.6m (15' 1") mono boom and 2.1m (6' 11"), 2.5m (8'20") Arm is available. Buckets are all-welded, high-strength steel implements.

Arm	Length	mm (ft.in)	*2,100 (6' 11")	2,500 (8' 20")
Bucket digging force	SAE	kN	87.3 (94.8)	87.3 (94.8)
		kgf	8,900 (9,660)	8900 (9660)
		lbf	19,620 (21,300)	9620 (2130)
	ISO	kN	102 (110.8)	102 (110.8)
		kgf	10,400 (11,290)	10400 (11290)
		lbf	22,930 (24,890)	22930 (24890)
Arm crowd force	SAE	kN	73.6 (79.9)	62.8 (68.2)
		kgf	7,500 (8,140)	6400 (6950)
		lbf	16,530 (17,950)	14110 (15320)
	ISO	kN	77.5 (84.1)	65.7 (71.4)
		kgf	7,900 (8,580)	6700 (7270)
		lbf	17,420 (18,910)	14770 (16040)

*: Standard arm weight including cylinder and linkage



Standard / Optional List

Standard Equipment

ISO standard cabin

All-weather steel cab with all-around visibility
Safety glass windows
Sliding fold-in front window
Sliding side window
Lockable door
Accessory box & Ashtray

Computer Aided Power Optimization (New CAPO) system

3-power mode, 2-work mode
Auto deceleration & one touch deceleration system
Auto overheat prevention system
Self diagnostic system
Centralized monitoring
LCD display
Fuel level gauge
Engine coolant temperature gauge
Hyd. oil temperature gauge

Warning

Fuel level
CPU
Engine oil pressure
Engine coolant temperature
Hyd. oil temperature
Low battery
Air cleaner clogging
Tool kit
Door and cab locks, one key
One outside rearview mirror
Fully adjustable suspension seat
Slidable joystick. pilot-operated
Three front working lights and two cabin work lights
Electric horn
Batteries (2 x 12V x 72 AH)
Battery master switch
Rear open window
Removable clean out screen for oil cooler
Automatic swing brake

Removable reservoir tank
Fuel pre-filter
Boom holding system
Arm holding system
Counter weight (1900kg)
Mono boom (4.6m, 15' 1")
Arm (2.1m, 6' 11")
Track shoes (500mm)
Track rail guard
Operator kit
FM radio
Cabin lights
General Purpose bucket (0.72 m³)
Air-conditioner (5000kcal/hr, 20000 BTU/hr)
Cabin front protector
Remote Management System (Hi-Track)

Optional Equipment

Sun visor for cabin inside
Beacon lamp
Single acting piping kit

Optional Buckets (SAE heaped)

Heavy duty bucket (0.65m³)
Track shoe (600mm)
Arm (2.5m, 8' 20")
Fan

