R1250-9

With Tier 2 Engine installed





Head Office(Sales Office)

11F, GLOBAL R&D CENTER, 477 BUNDANG SUSEO-RO, BUNDANG-GU, SEONGNAM-SI, GYEONGGI-DO, 13553, KOREA

PLEASE CONTACT







PRECISION

- · Auto Boom-swing Priority
- · Computer Aided Power
- · Improved Hydraulic System



PERFORMANCE

- · CUMMINS QSK23 Engine
- $\cdot \ \text{Heavy-duty strength} \\$
- Structure StrengthExcellent Reliability and Durability



PREFERENCE

- Wide Cabin with Excellent Visibility
- · Operator Comfort
- · Reduced Stress
- · Operator Friendly Cluster



- · Enhanced Safety
- · Hi-MATE
- (Remote Management System)
- · Easy Access
- · Long-Life Components



*Photo may include optional equipment.

PRECISION

Innovative hydraulic system technologies make the 9 series excavator fast, smooth and easy to control.

Computer Aided Power

The CAPO system also provides complete self diagnostic features and digital gauges for important information like hydraulic oil temperature, water temperatures and fuel level. This system interfaces with multiple sensors placed throughout the hydraulic system as well as the electronically controlled engine to provide the optimum level of engine power and hydraulic flow.

Power

- P (Power Max) mode maximizes machine speed and power for mass production.
- S (Standard) mode provides a reduced, fixed rpm for optimum performance and improved fuel economy.

 For maximum fuel savings and improved control.
- E (Economy) mode provides precise flow and engine a power based on load demand.

Some jobs require more precise machine settings.
Using the versatile U (User) mode, the operator can
customize engine speed, pump output, idle speed
and other machine settings for the job at hand.



Auto Boom-swing Priority

This smart function automatically and conti-nuously looks the ideal hydraulic flow balance for the boom and swing motions of the machine. The advanced CAPO system monitors the hydraulic system and adjusts its settings to maximize performance and productivity.



Improved Hydraulic System

Improved hydraulic valves, precision-designed variable volume piston pumps, fine-touch pilot controls, and enhanced travel functions make any operator running a 9 series look like a smooth operator. Newly improved features include arm-in and boom-down flow regeneration, improved control valve technology and innovative auto boom and swing priority for optimal performance in any application.

HD HYUNDAI

PERFORMANCE

9 series is designed for maximum performance to keep the operator working productively.

CUMMINS QSK23 Engine

The Tier II compliant, six cylinder, turbo-charged, 4 cycle, water cooled, Cummins QSK23 diesel engine is built for power, reliability, efficiency and reduced emissions.

Heavy-duty strength

Its high-pressure injection (HPI) fuel system (up to 29,000 psi / 200,000 kPa) results in more complete combustion for superior engine response across the entire power curve and the lowest fuel consumption in its class. Its compact and balanced inline six-cylinder design and proven durability in the toughest mine sites make it a great choice to repower vee engines of similar displacement.

The one-piece Ferrous Cast Ductile (FCD) iron pistons and robust cylinder head work to improve long-term durability and dependability. A one-piece cast-iron block, forged-steel crankshaft and a large-diameter camshaft ensure long, reliable performance between overhauls, with the capability of multiple rebuild cycles.







PREFERENCE

Operators can fully customize their work environment and operating preferences to fit their individual needs.

Operator Comfort

In 9 series cabin you can easily adjust the seat, console and armrest settings to best suit your preferred comfort level. Other preference settings that add to overall operator comfort include the full automatic high capacity air conditioning system, transparent polycarbonate glass sun roof, large and easy to control sun visor, and radio / USB player.



Reduced Stress

system and the optimized vent positions provide the operator with optimum air temperature. An advanced audio system with USB player, AM/FM stereo, plus remotely located controls is perfect for listening to music favorites. Operators can even talk on the phone with the hands-free cell phone feature.

Wide Cabin with Excellent Visibility

The powerful climate control The newly designed cabin was conceived for more space, a wider field of view and operator comfort. Single piece right side glass improves visibility and operator comfort. Plus, the front defrosting system provides more comfortable working condition. Special attention was given to a clear, open and convenient interior with plenty of visibility on the machine surroundings and the job at hand.





Enhanced Safety

Variable cabin guards offer enhanced operator safety. And the work lamps on the cab improved operator convenience at night time. Wide cat-walks, large handrails and anti-slip plates provide easy access to the cab and safer maintenance.



PROFITABILITY

9 series is designed to maximize profitability through improved efficiencies, enhanced service features and longer life components.



It's Convenient, Easy and Valuable

Hi MATE Hyundai's newly developed remote management system, utilizes GPS-satellite technolgy to provide customers with the highest level of service and product support available. Hi-mate enables users to remotely evaluate machine performance, access diagnostic information, and verify machine locations at the touch of a button.

What is benefits



Increase Productivity

It helps you operate machines in efficient. You can check the difference between total engine hours and actual working hours. See how productive your machines are and plan any required cost saving solutions. Hi MATE offers working information such as working / idling hours, fuel consumption and rate.



Convenient and Easy Monitoring

There is nothing much to do to monitor your machines. Just log on to the Hi MATE website or mobile application. Hi MATE allows you to watch your machines whenever and wherever you are.



Security

Protect your machines from theft or unauthorized usage with Hi MATE. If the machine moves out of the Geo-fence boundary, you will get alerts.

Easy Access

Concentrated engine filters, remote type fuel pre-filter and fuel cut valve, and wide open compartments make service more convenient. The auto greasing system at the touch of a button provides simple and easy maintenance.



Long-Life Components

9 series excavators were designed with bushings designed for long-life lube intervals (250 hrs) & polymer shims (wear resistant, noise reducing), long-life hydraulic filters (1,000 hrs), long-life hydraulic oil (5,000 hrs), more efficient cooling systems and integrated preheating systems.





SPECIFICATIONS

ENGINE			
Maker / I	Model		CUMMINS QSK23
Туре			Water-cooled, 4-cycle Diesel, 6-Cylinder in-line, Direct injection, Turbocharged, Charger air cooled, Low emission
Rated flywheel horse power	SAE	J1995 (gross)	760 HP (567 kW) at 1,800 rpm
		J1349 (net)	740 HP (552 kW) at 1,800 rpm
	DIN	6271/1(gross)	771 PS (567 kW) at 1,800 rpm
		6271 /1(net)	750 PS (552 kW) at 1,800 rpm
Max. torque			354 kgf·m (2,560 lbf·ft) at 1,350 rpm
Bore X Stroke			170 × 170 mm (6.69" × 6.69")
Piston displacement			23,000 cc (1,404 in ³)
Batteries			4 × 12 V × 160 Ah
Starting motor			2 × 24 V × 7.5 kW
Alternator			24 V × 75 A

HYDRAULIC SYSTEM

MAIN	DLI	MD	
VIIAIIV	PU	IVIP	

Туре	Variable displacement axial piston pumps
Max. flow	3 × 504 l/min (133.1 US gpm / 110.9 UK gpm)
	1 x 123 ℓ/min (32.5 gpm / 27.1 UK gpm)
Sub-pump for pilot circuit	Gear pump

Cross-sensing and fuel saving pump system.

HYDRAULIC MOTORS

Travel	Two speed axial pistons motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake

RELIEF VALVE SETTING

Implement circuits	320 kgf/cm ² (4,550 psi)
Travel	350 kgf/cm ² (4,980 psi)
Power boost (boom, arm, bucket)	350 kgf/cm² (4,980 psi)
Swing circuit	300 kgf/cm ² (4,270 psi)
Pilot circuit	40 kgf/cm ² (570 psi)
Service valve	Installed

HYDRAULIC CYLINDERS

	Boom: 230 × 2,165 (9.1" × 85.2")
No. of cylinder bore X stroke	Arm: 260 × 2,180 mm (10.2" × 85.8")
bole × 3tl oke	Bucket: 240 × 1,792 mm (9,4" × 70.6")

DRIVES & BRAKES

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	70,200 kgf (154,800 lbf)
Max. travel speed (high / low)	3.2 km/hr (2.0 mph) / 2.3 km/hr (1.4 mph)
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 with pedals
Engine throttle	Electric, dial type

SWING SYSTEM		
Swing motor	Axial piston motor	
Swing reduction	Planetary gear reduction	
Swing bearing lubrication	Grease-bathed	
Swing brake	Multi wet disc	
Swing speed	5.6 rpm	

COOLANT & LUBRICANT CAPACITY			
	liter	US gal	UK gal
Fuel tank	1,475.0	389.7	324.5
Engine coolant	100.0	26.4	22.0
Engine oil	70.0	18.5	15.4
Swing device - gear oil	8.0	2.1	1.8
Final drive (each) - gear oil	20.0	5.3	4.4
Hydraulic system (including tank)	1,160.0	306.4	255.2
Hydraulic tank	670.0	177.0	147.4

UNDERCARRIAGE

The 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 springs and sprockets, and a track chain with double or triple grouser shoes.

Center frame	X - leg type
Track frame	Pentagonal box type
No. of shoes on each side	52 EA
No. of carrier roller on each side	3 EA
No. of track roller on each side	8 EA
No. of rail guard on each side	2 EA

OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 7,550 mm (24' 9") boom, 3,400 mm (11' 2") arm, SAE heaped 7.00m 3 (9.16 yd 3) HD bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipments.

MAJOR COMPONENT WEIGHT		
29,030 kg (64,000 lb)		
20,490 kg (45,170 lb)		
12,070 kg (26,610 lb)		

OPERATING WEIGHT

Type Width mm (in)		Operating weight	Ground pressure
		kg (lb)	kgf/cm² (psi)
	700 (28")	120,700 (266,100)	1.58 (22.43)
Double grouser	800 (32")	121,500 (267,860)	1.39 (19.76)
	900 (36")	122,300 (269,630)	1.24 (17.68)

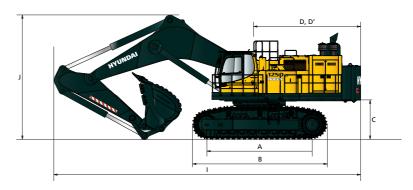
AIR CONDITIONING SYSTEM

The air condition system for the machine contains the fluorinated greenhouse gas with global warming potential of R134a. (Global Warming Potential : 1,430) The system hold 1 kg refrigerant consisting of a CO_2 equivalent 1.43 kg metric tonne. For more information, Please refer to the manual.

DIMENSION & WORKING RANGE

R1250-9 DIMENSION

7.55m Boom / 3.40m Arm



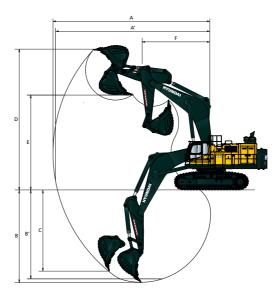


Unit:mm (ft·in)

Α	Tumbler distance	5,010	(16' 5")
В	Overall length of crawler	6,400	(20' 12")
С	Ground clearance of counterweight	1,825	(5' 12")
D	Tail swing radius	4,865	(15' 12")
D'	Rear-end length	4,805	(15' 9")
Е	Overall width of upperstructure	3,520	(11' 7")
_	Overall STD	4,250	(13' 11")
F	height of cab Cab riser (opt)	5,450	(17' 11")
G	Min. ground clearance	990	(3' 3")
Н	Track gauge	3,900	(12' 10")

		Grife i min
	Boom length	7,550 (24' 9")
	Arm length	3,400 (11' 2")
ı	Overall length	14,520 (47' 8")
J	Overall height of boom	6,190 (20' 4")
K	Track shoe Width	700 (2' 4")
L	Overall Width	5,560 (18' 3")

R1250-9 WORKING RANGE



		Unit : mm (ft·in)
	Boom length	7,550
		(24' 9")
	Armlonath	3,400
	Arm length	(11' 2")
	Many allocations and a sub-	13,760
Α	Max. digging r each	(45' 2")
Α'	Max. digging reach	13,380
A	on ground	(43' 11")
_	Many alternative desirable	8,010
В	Max. digging depth	(26' 3")
R'	Max. digging depth	7,840
В	(8' level)	(25' 9")
C	Max. vertical wall	5,230
C	digging depth	(17' 2")
_	Many alternations to a table	12,420
D	Max. digging height	(40' 9")
_	Many alternative but also	7,790
Е	Max. dumping height	(26' 5")
_	Nation and the second states	6,550
F	Min. swing radius	(21' 6")

BUCKET SELECTION GUIDE & DIGGING FORCE

BUCKETS











6.00

SAE heaped	
m^3 (yd 3)	

6.70

7.00

8.57

Capacity m³ (yd³)					Recommendation mm (ft·in)		
		Width mm (in)	Weight kg (lb)	Tooth EA	7,550 (24' 9") Boom		
	SAE heaped	CECE heaped		,	9 ()		3,400 (11' 2") Arm
\oplus	6.70 (8.76)	5.90 (7.72)	2,535 (99.8")	7,385 (16,280)	6	•	
$^{\oplus}$	7.00 (9.16)	6.15 (8.04)	2,535 (99.8")	7,565 (16,680)	6	•	
\mathbb{H}	8.57 (11.21)	7.68 (10.05)	2,535 (99.8")	7,295 (16,080)	6	•	
R	6.00 (7.85)	5.30 (6.93)	2,420 (99.8")	6,605 (14,560)	5	•	

 $\ensuremath{\mathbb{H}}$: Heavy Duty

®: Rock

- Applicable for materials with density of 2,100 kg/m³ (3,500 lb/yd³) or less
 Applicable for materials with density of 1,800 kg/m³ (3,000 lb/yd³) or less

- Applicable for materials with density of 1,500 kg/m³ (2,500 lb/yd³) or less
 Applicable for materials with density of 1,500 kg/m³ (2,500 lb/yd³) or less
 Applicable for materials with density of 1,200 kg/m³ (2,000 lb/yd³) or less
 ▲ Applicable for materials with density of 900 kg/m³ (1,500 lb/yd³) or less
- Not Recommended

ATTACHMENT

Booms and arms are of all-welded, low-stress, full-box section design.

7,550 mm (24' 9"), boom and 3,400 mm (11' 2"), arms are available, Hyundai Bucket are all-welded, high-strength steel implements.

DIGGING FORCE					
D	Length	mm (ft·in)	7,550 (24' 9")		
Boom	Weight	kg (lb)	10,540 (23,240)	Remark	
Arm	Length	mm (ft·in)	3,400 (11' 2")	Remark	
Arm	Weight	kg (lb)	4,030 (8,880)		
	SAE	kN	511.9 [558.5]		
		kgf	52,200 [56,950]		
Bucket		lbf	115,080 [125,540]		
digging force	ISO	kN	581.5 [634.4]		
10100		kgf	59,300 [64,690]		
		lbf	130,730 [142,610]	[]: Power	
		kN	423.7 [462.2]	Boost	
Arm	SAE	kgf	43,200 [47,130]		
		lbf	95,240 [103,900]		
crowd force		kN	429.5 [468.6]		
10/00	ISO	kgf	43,800 [47,780]		
		lbf	96,560 [105,340]		

Note : Boom weight includes arm cylinder, piping, and pin Arm weight includes bucket cylinder, linkage, and pin



TRANSPORTATION PLAN



BAS	E MACHINE		
	Dimension mm (ft \cdot in)		Weight
L	Н	W	kg (lb)
6,885 (22' 7")	3,410 (11' 2")	3,580 (11' 9")	49,530 (109,190)



	TRACK FRAME			
	Weight			
Shoe	L	Н	W	kg (lb)
700 (24")	6,425 (21' 1")	1,585 (5' 2")	1,060 (3' 6")	14,150 (31,200)
800 (32")	6,425 (21' 1")	1,585 (5' 2")	1,110 (3' 8")	14,820 (32,670)
900 (35")	6,425 (21' 1")	1,585 (5' 2")	3,580 (11' 9")	15,620 (34,440)



BOOM ASSEMBLY (BOOM & PIPING & ARM CYLINDER & PINS)						
	Dimension mm (ft·in)					
	Boom L H W					
	7.55 m (24' 9") 7,930 (26' 0") 3,430 (11' 3") 1,500 (4' 11")					



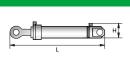
ARM ASSEMBLY (ARM & PIPING & BUCKET CYLINDER & CONTROL LINKAGE & PINS)						
		Dimension	mm (ft·in)		Weight	
1 H	Arm	L	Н	W	kg (lb)	
	3.40 m (11' 2")	5,030 (16' 6")	930 (3' 1")	1,720 (5' 8")	6,500 (14,330)	



BUCKETAS					
	Dimension mm (ft·in)				
$m^3(yd^3)$	L	Н	W	kg (lb)	
⊕ 6.70 (8.76)	2,833 (9' 4")	2,351 (7' 9")	2,625 (8' 7")	7,385 (16,280)	
H 7.00 (9.16)	2,862 (9' 5")	2,417 (7' 11")	2,625 (8' 7")	7,565 (16,680)	
H 8.57 (11.21)	2,991 (9' 10")	2,449 (8' 0")	2,632 (8' 8")	7,295 (16,080)	
® 6.00 (7.85)	2,783 (9' 2")	2,342 (7' 8")	2,453 (8' 1")	6,605 (14,560)	



CAB /	ASSEMBLY		
	Dimension mm (ft \cdot in)		Weight
L	Н	W	kg (lb)
1,960 (6' 5")	1,675 (5' 6")	1,290 (4' 3")	310 (0.680)



OM CTLINDER (2 EA WEIGHT : 1,090 × 2 = 2,380 kg)						
	Dimension mm (ft \cdot in)		Weight			
L	Н	W	kg (lb)			
3,615 (11' 10")	432 (1' 5")	340 (1' 1")	1,090 (1EA) (2,400)			



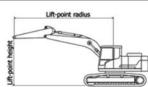
CC	OUNTER WEIGHT			
		Dimension mm (ft·in))	Weight
Arm	L	Н	W	kg (lb)
STD	3,520 (11' 7")	1,840 (6' 0")	980 (3' 3")	20,490 (45,170)

LIFTING CAPACITY

25	

Boom: 7.55 m (24' 9") / Arm: 3.40 m (11' 2") / Shoe: 700 mm (28") triple grouser

							Lift-poir	nt radius						At	max. rea	ch
Lift-po		3.0 m (9.8 ft)	4.5 m (1	4.8 ft)	6.0 m (19.7 ft)	7.5 m (2	4.6 ft)	9.0 m (2	29.5 ft)	10.5 m (3	34.4 ft)	Capa	city	Reach
(m/f			45)	ď	45)	ď	45)	b	45)		₽	b	₽	P	4	m (ft)
9.0m	kg									*19,580	*19,580			*14,850	*14,850	9.27
29.5ft	lb									*43,170	*43,170			*32,740	*32,740	(30.4)
7.5m	kg									*25,900	*25,900			*14,460	*14,460	10.10
24.6ft	lb									*57,100	*57,100			*31,880	*31,880	(33.1)
6.0m	kg							*31,100	*31,100	*26,900	*26,900	*17,990	*17,990	*14,490	*14,490	10.64
19.7ft	lb							*68,560	*68,560	*59,300	*59,300	*39,660	*39,660	*31,940	*31,940	(34.9)
4.5m	kg					*42,940	*42,940	*33,570	*33,570	*28,140	27,500	*24,560	21,560	*14,900	*14,900	10.95
14.8ft	lb					*94,670	*94,670	*74,010	*74,010	*62,040	60,630	*54,150	47,530	*32,850	*32,850	(35.9)
3.0m	kg							*35,510	34,730	*29,150	26,530	*24,820	21,030	*15,720	*15,720	11.03
9.8ft	lb							*78,290	76,570	*64,260	58,490	*54,720	46,360	*34,660	*34,660	(36.2)
1.5m	kg					*46,700	*46,700	*36,270	33,510	*29,500	25,740	*24,570	20,580	*17,040	*17,040	10.90
4.9ft	lb					*102,960	*102,960	*79,960	73,880	*65,040	56,750	*54,170	45,370	*37,570	*37,570	(35.8)
0.0m	kg					*44,880	*44,880	*35,540	32,800	*28,800	25,240	*21,090	20,350	*19,150	*19,150	10.55
0.0ft	lb					*98,940	*98,940	*78,350	72,310	*63,490	55,640	*46,500	44,860	*42,220	*42,220	(34.6)
-1.5m	kg			*50,120	*50,120	*41,080	*41,080	*33,070	32,570	*26,540	25,090			*22,370	21,940	9.94
-4.9ft	lb			*110,500	*110,500	*90,570	*90,570	*72,910	71,800	*58,510	55,310			*49,320	48,370	(32.6)
-3.0m	kg	*45,200	*45,200	*41,780	*41,780	*35,030	*35,030	*28,320	*28,320	*21,290	*21,290			*21,030	*21,030	9.04
-9.8ft	lb	*99,650	*99,650	*92,110	*92,110	*77,230	*77,230	*62,430	*62,430	*46,940	*46,940			*46,360	*46,360	(29.7)
-4.5m	kg			*29,670	*29,670	*25,510	*25,510	*19,220	*19,220					*17,860	*17,860	7.73
-14.8ft	lb			*65,410	*65,410	*56,240	*56,240	*42,370	*42,370					*39,370	*39,370	(25.4)
-6.0m	kg															
-19.7ft	lb															



^{| 1 |} Lifting capacity are based on ISO 10567.
| 2 | Lifting capacity of HX Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
| 3 | The Lift-point is bucket pivot mounting pin on the arm(without bucket mass).
| 4 | (*) indicates load limited by hydraulic capacity.

STANDARD / OPTIONAL EQUIPMENT

STANDARD EQUIPMENT
ISO Standard Cabin

150 Standard Cabin
All-weather steel cab with 360° visibility
Safety glass windows
Rise-up type windshield wiper
Sliding fold-in front window
Sliding side window (LH)
Lockable door
Hot & Cool box
Storage compartment & Ashtray
Cabin roof-steel cover
Radio / USB player
12 V power outlet (24 V DC to 12 V DC converter)
Handsfree mobile phone system with USB
Sun visor
Cabin FOPS/FOG (ISO/DIS 10262 Level 2)
FOPS (Falling Object Protective Structure)
FOG (Falling Object Guard)
Cabin lights
Computer aided power optimization (New CAPO) system
3-power mode, 2-work mode, user mode
Auto deceleration & one-touch deceleration system
Auto warm-up system
Auto overheat prevention system
Automatic Climate Control
Full automatic temperature controller
Defroster
Self-diagnostics system
Starting aid (air grid heater) for cold weather
Centralized Monitoring
8" LCD display
Engine speed or trip meter/Accel
Clock
Gauges
Fuel level gauge
Engine coolant temperature gauge
Hyd. oil temperature gauge
Warnings
Check engine
Overload
Communication error
Low battery
Air cleaner clogging
Indicators
Max power
Low speed / High speed
Fuel warmer
Auto idle
Two outside rearview mirrors
Air-suspension seat with heater
Pilot-operated slidable joystick
THOSE OPERATED SHOUNTE JOYSTICK

	sole box height adjust system
Six	front working lights, two rear lights
Air	horn
Bat	teries (2 × 12 V × 150 AH)
Bat	tery master switch
Ren	novable clean-out dust net for cooler
Aut	omatic swing brake
Aut	omatic fuel line deaeration
Fue	l pre-filter with fuel warmer
Boo	m holding system
Arn	n holding system
Trad	ck shoes (700 mm, 28")
Full	track rail guard
Acc	umulator for lowering work equipment
Elec	tric transducer
Low	ver frame under cover
Visc	cous fan clutch
Air	compressor
Tra	vel alarm
OP	FIONAL EQUIPMENT
Fue	l filler pump (50 ℓ/min)
_	con lamp
Воо	ms
7.5	55 m, 24' 9"
Arn	ns
3.4	40 m, 11' 2"
Clin	nate control
Air	conditioner only
He	ater only
Tra	ck Shoes
Do	uble grousers shoe (800 mm, 32")
	uble grousers shoe (900 mm, 36")
	-heating system, coolant
	l kit
	rview camera
Sea	
-	echanical suspension seat
	echanical suspension seat with heater
	r-suspension seat
	omatic lubrication
	nate (Remote Management System)
	cleaner
rie	LICAI ICI
The m The ph Mater	ard and optional equipment may vary. Contact your hyundai dealer for more information. sachine may vary according to international standards. notos may include attachments and optional equipment that are not available in your area. ials and specifications are subject to change without advance notice. serial measurements rounded off to the nearest pound or inch.

MEMO