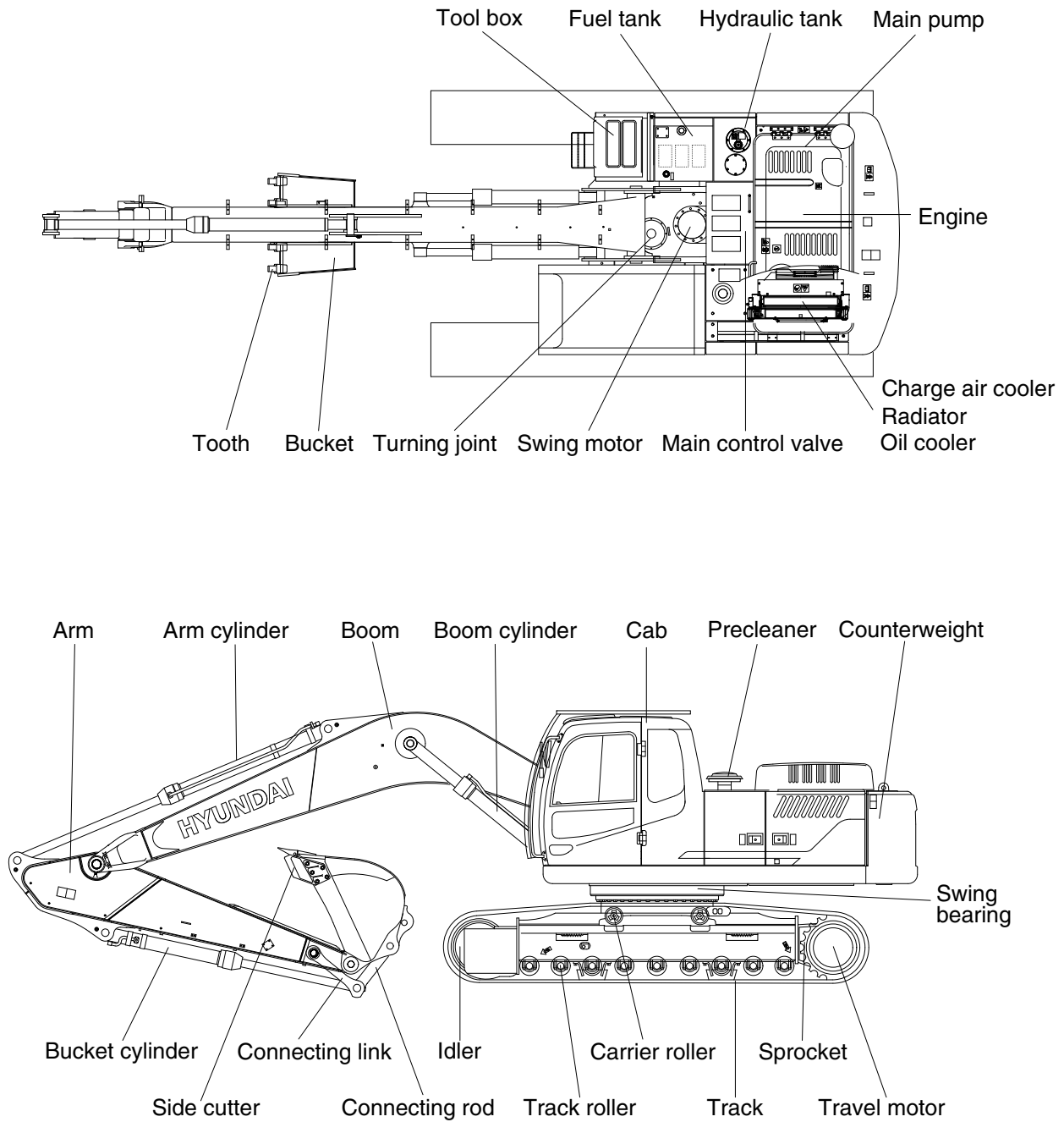


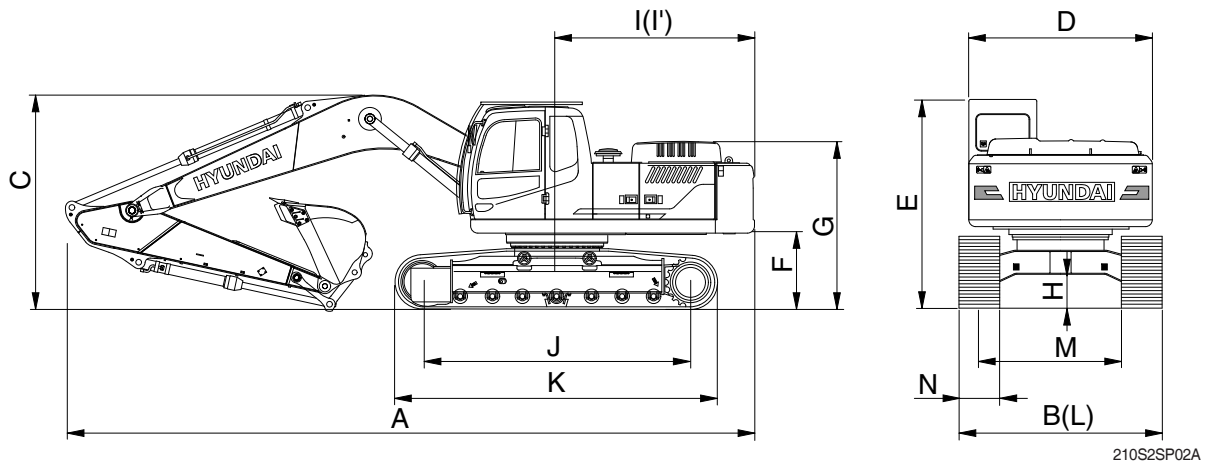
1. MAJOR COMPONENT



210S2SP01A

2. SPECIFICATIONS

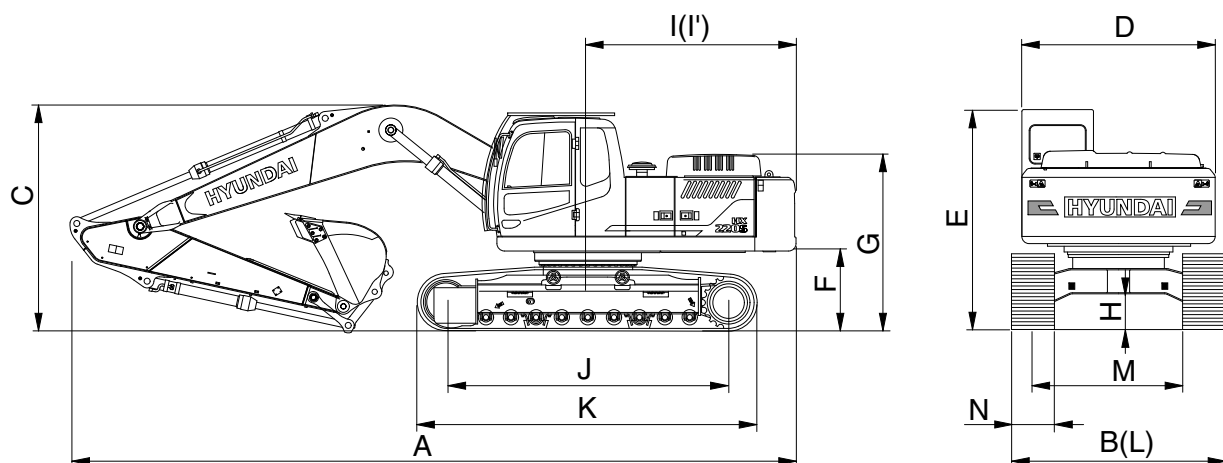
1) HX210S, MONO BOOM



Description		Unit		Specification		
		m (ft-in)	Boom	5.68 (18' 8")		
			Arm	2.92 (9' 7")	2.00 (6' 7")	2.40 (7' 10")
		mm (in)	Shoe	600 (24)		
Operating weight		kg (lb)		20830 (45920)	20670 (45570)	20740 (45720)
Bucket capacity (SAE heaped), standard		m³ (yd³)		0.92 (1.20)	0.92 (1.20)	0.92 (1.20)
Overall length	A	mm (ft-in)		9530 (31' 3")	9650 (31' 8")	9570 (31' 5")
Overall width	B			2800 (9' 2")	2800 (9' 2")	2800 (9' 2")
Overall height of boom	C			3030 (9' 11")	3200 (10' 6")	3110 (10' 2")
Superstructure width	D			2700 (8' 10")	2700 (8' 10")	2700 (8' 10")
Overall height of cab	E			3000 (9' 10")	3000 (9' 10")	3000 (9' 10")
Ground clearance of counterweight	F			1060 (3' 6")	1060 (3' 6")	1060 (3' 6")
Overall height of engine hood	G			2380 (7' 10")	2380 (7' 10")	2380 (7' 10")
Overall height of handrail	G'			2970 (9' 9")	2970 (9' 9")	2970 (9' 9")
Minimum ground clearance	H			470 (1' 7")	470 (1' 7")	470 (1' 7")
Rear-end distance	I			2770 (9' 1")	2770 (9' 1")	2770 (9' 1")
Rear-end swing radius	I'			2845 (9' 4")	2845 (9' 4")	2845 (9' 4")
Distance between tumblers	J			3360 (11' 0")	3360 (11' 0")	3360 (11' 0")
Undercarriage length	K			4170 (13' 8")	4170 (13' 8")	4170 (13' 8")
Undercarriage width	L			2800 (9' 2")	2800 (9' 2")	2800 (9' 2")
Track gauge	M			2200 (7' 3")	2200 (7' 3")	2200 (7' 3")
Track shoe width, standard	N			600 (2' 0")	600 (2' 0")	600 (2' 0")
Travel speed (low/high)		km/hr (mph)		3.5/5.7 (2.2/3.5)	3.5/5.7 (2.2/3.5)	3.5/5.7 (2.2/3.5)
Swing speed		rpm		12.2	12.2	12.2
Gradeability		Degree (%)		35 (70)	35 (70)	35 (70)
Ground pressure		kgf/cm² (psi)		0.48 (6.81)	0.48 (6.76)	0.48 (6.78)
Max traction force		kg (lb)		21100 (46517)	21100 (46517)	21100 (46517)

Machine Serial No. : -#4560, #4880-#4922

2) HX220S, MONO BOOM

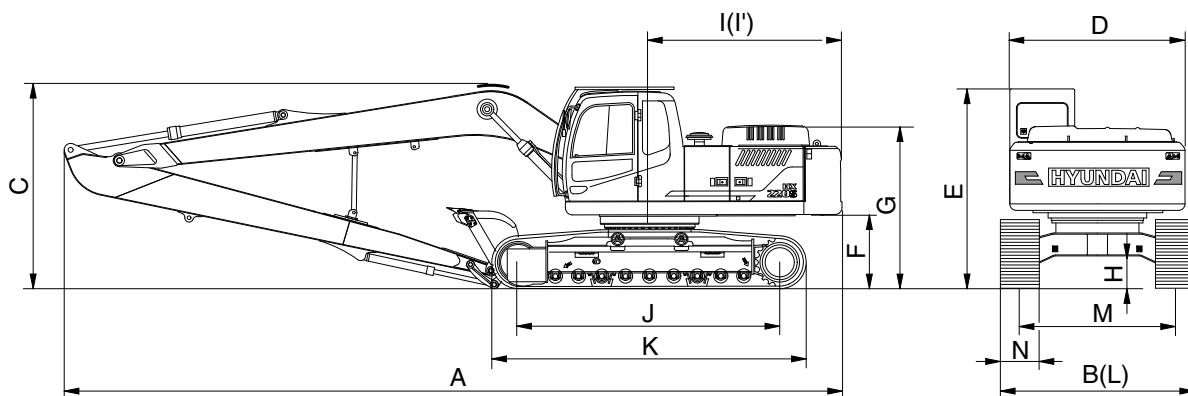


210S2SP03

Description		Unit		Specification		
		m (ft-in)	Boom	5.68 (20' 6")		
			Arm	2.92 (9' 7")	2.00 (6' 7")	2.40 (7' 10")
		mm (in)	Shoe	600 (24)		
Operating weight		kg (lb)		21260 (46870)	21100 (46520)	21160 (46650)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)		0.92 (1.20)	0.92 (1.20)	0.92 (1.20)
Overall length	A	mm (ft-in)		9530 (31' 3")	9650 (31' 8")	9570 (31' 5")
Overall width	B			2990 (9' 10")	2990 (9' 10")	2990 (9' 10")
Overall height of boom	C			3030 (9' 11")	3200 (10' 6")	3110 (10' 2")
Superstructure width	D			2700 (8' 10")	2700 (8' 10")	2700 (8' 10")
Overall height of cab	E			3000 (9' 10")	3000 (9' 10")	3000 (9' 10")
Ground clearance of counterweight	F			1060 (3' 6")	1060 (3' 6")	1060 (3' 6")
Overall height of engine hood	G			2380 (7' 10")	2380 (7' 10")	2380 (7' 10")
Overall height of handrail	G'			2970 (9' 9")	2970 (9' 9")	2970 (9' 9")
Minimum ground clearance	H			470 (1' 7")	470 (1' 7")	470 (1' 7")
Rear-end distance	I			2770 (9' 1")	2770 (9' 1")	2770 (9' 1")
Rear-end swing radius	I'			2845 (9' 4")	2845 (9' 4")	2845 (9' 4")
Distance between tumblers	J			3650 (12' 0")	3650 (12' 0")	3650 (12' 0")
Undercarriage length	K			4440 (14' 7")	4440 (14' 7")	4440 (14' 7")
Undercarriage width	L			2990 (9' 10")	2990 (9' 10")	2990 (9' 10")
Track gauge	M			2390 (7' 10")	2390 (7' 10")	2390 (7' 10")
Track shoe width, standard	N			600 (2' 0")	600 (2' 0")	600 (2' 0")
Travel speed (low/high)		km/hr (mph)		3.5/5.7 (2.2/3.5)	3.5/5.7 (2.2/3.5)	3.5/5.7 (2.2/3.5)
Swing speed		rpm		12.2	12.2	12.2
Gradeability		Degree (%)		35 (70)	35 (70)	35 (70)
Ground pressure		kgf/cm ² (psi)		0.45 (6.45)	0.45 (6.41)	0.45 (6.42)
Max traction force		kg (lb)		21100 (46517)	21100 (46517)	21100 (46517)

Machine Serial No. : -#4560, #4880-#4922

3) HX220S LR

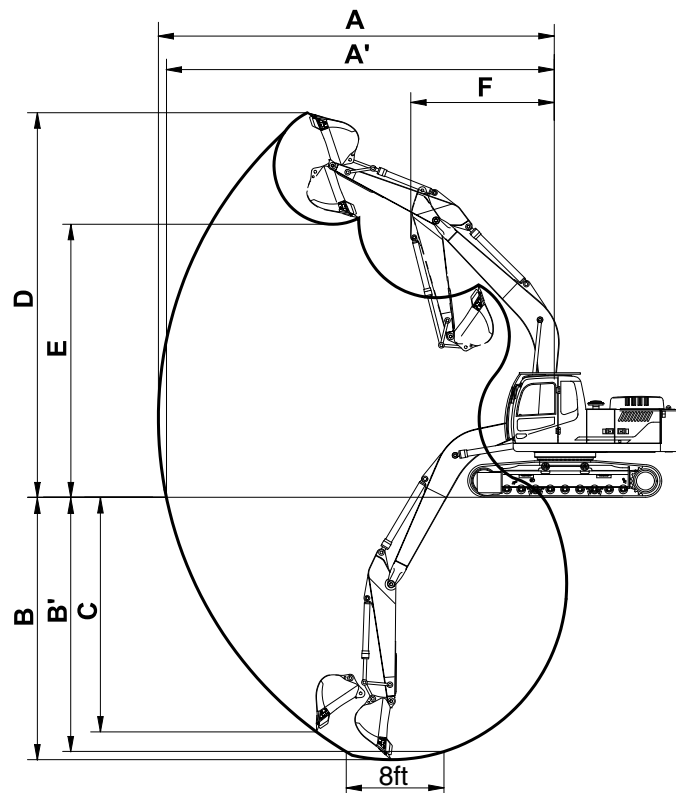


210S2SP10

Description		Unit		Specification
		m (ft-in)	Boom	8.2 (26' 11")
			Arm	6.30 (20' 8")
		mm (in)	Shoe	800 (32)
Operating weight		kg (lb)		24390 (53770)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)		0.52 (0.68)
Overall length	A	mm (ft-in)		12030 (39' 6")
Overall width	B			3190 (10' 6")
Overall height of boom	C			3280 (10' 9")
Superstructure width	D			2700 (8' 10")
Overall height of cab	E			3000 (9' 10")
Ground clearance of counterweight	F			1060 (3' 6")
Overall height of engine hood	G			2380 (7' 10")
Overall height of handrail	G'			2970 (9' 9")
Minimum ground clearance	H			470 (1' 7")
Rear-end distance	I			2770 (9' 1")
Rear-end swing radius	I'			2845 (9' 4")
Distance between tumblers	J			3650 (12' 0")
Undercarriage length	K			4440 (14' 7")
Undercarriage width	L			3190 (10' 6")
Track gauge	M			2390 (7' 10")
Track shoe width, standard	N			800 (2' 7")
Travel speed (low/high)		km/hr (mph)		3.66/5.76
Swing speed		rpm		12.4
Gradeability		Degree (%)		35 (70)
Ground pressure		kgf/cm ² (psi)		0.39 (5.55)
Max traction force		kg (lb)		20832 (45930)

3. WORKING RANGE AND DIGGING FORCE

1) HX210S, MONO BOOM

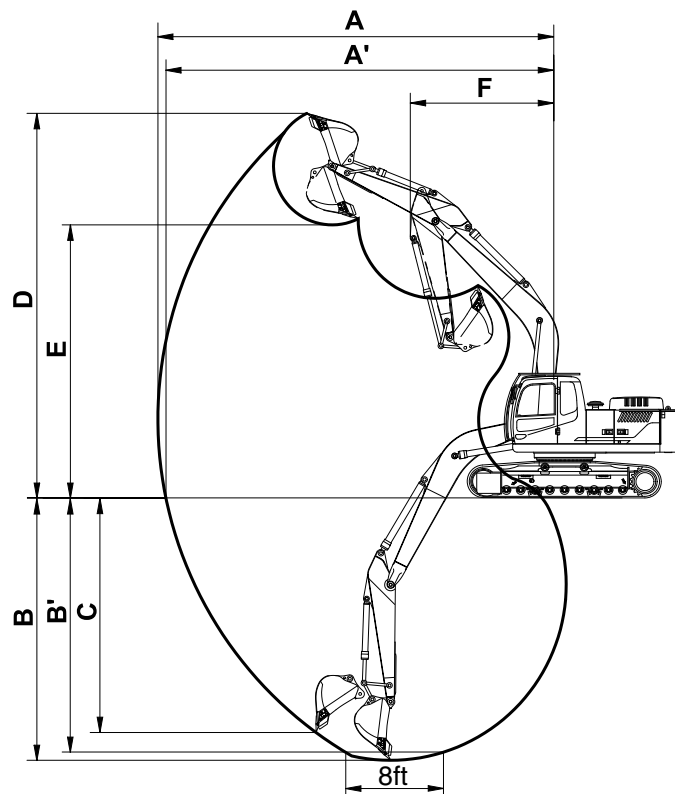


210S2SP04A

Description	m (ft-in)	Boom	5.68 (18' 8")		
		Arm	2.92 (9' 7")	2.00 (6' 7")	2.40 (7' 10")
Max digging reach	mm (ft-in)	A	9,980 (32' 9")	9,140 (30' 0")	9,500 (31' 2")
Max digging reach on ground		A'	9,820 (32' 3")	8,960 (29' 5")	9,330 (30' 7")
Max digging depth		B	6,730 (22' 1")	5,820 (19' 1")	6,220 (20' 5")
Max digging depth (8 ft level)		B'	6,560 (21' 6")	5,580 (18' 4")	6,010 (19' 9")
Max vertical wall digging depth		C	6,280 (20' 7")	5,280 (17' 4")	5,720 (18' 9")
Max digging height		D	9,600 (31' 6")	9,140 (30' 0")	9,340 (30' 8")
Max dumping height		E	6,780 (22' 3")	6,330 (20' 9")	6,520 (21' 5")
Min swing radius		F	3,670 (12' 0")	3,750 (12' 4")	3,740 (12' 3")
Bucket digging force	kN	SAE	133.4	133.4	133.4
	kgf		13600	13600	13600
	lbf		29980	29980	29980
	kN	ISO	152.0	152.0	152.0
	kgf		15500	15500	15500
	lbf		34170	34170	34170
Arm digging force	kN	SAE	102.0	144.2	119.6
	kgf		10400	14700	12200
	lbf		22930	32410	26900
	kN	ISO	106.9	151.0	125.5
	kgf		10900	15400	12800
	lbf		24030	33950	28220

Machine Serial No. : -#4560, #4880-#4922

2) HX220S, MONO BOOM

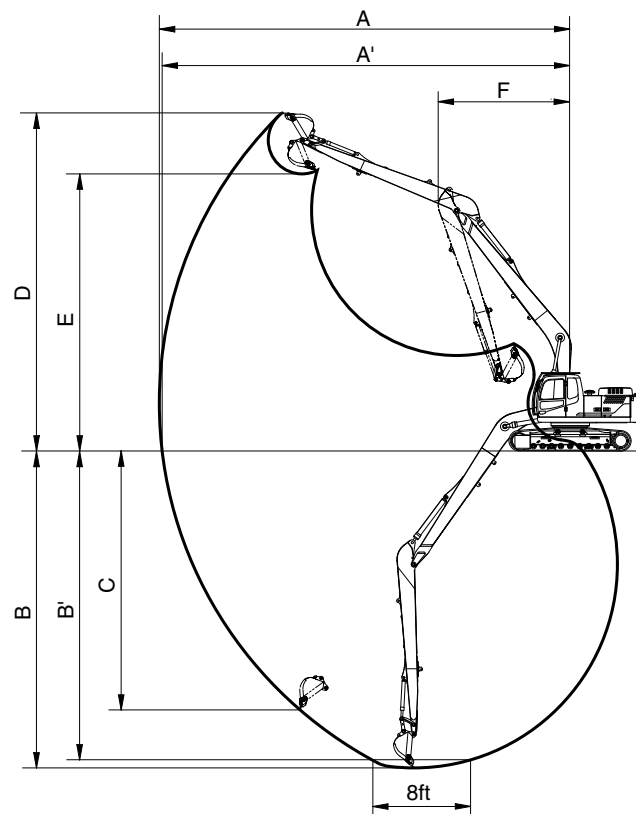


210S2SP04A

Description	m (ft-in)	Boom	5.68 (20' 6")		
		Arm	2.92 (9' 7")	2.00 (6' 7")	2.40 (7' 10")
Max digging reach	mm (ft-in)	A	9,980 (32' 9")	9,140 (30' 0")	9,500 (31' 2")
Max digging reach on ground		A'	9,820 (32' 3")	8,960 (29' 5")	9,330 (30' 7")
Max digging depth		B	6,730 (22' 1")	5,820 (19' 1")	6,220 (20' 5")
Max digging depth (8 ft level)		B'	6,560 (21' 6")	5,580 (18' 4")	6,010 (19' 9")
Max vertical wall digging depth		C	6,280 (20' 7")	5,280 (17' 4")	5,720 (18' 9")
Max digging height		D	9,600 (31' 6")	9,140 (30' 0")	9,340 (30' 8")
Max dumping height		E	6,780 (22' 3")	6,330 (20' 9")	6,520 (21' 5")
Min swing radius		F	3,670 (12' 0")	3,750 (12' 4")	3,740 (12' 3")
Bucket digging force	kN	SAE	133.4	133.4	133.4
	kgf		13600	13600	13600
	lbf		29980	29980	29980
	kN	ISO	152.0	152.0	152.0
	kgf		15500	15500	15500
	lbf		34170	34170	34170
Arm digging force	kN	SAE	102.0	144.2	119.6
	kgf		10400	14700	12200
	lbf		22930	32410	26900
	kN	ISO	106.9	151.0	125.5
	kgf		10900	15400	12800
	lbf		24030	33950	28220

Machine Serial No. : -#4560, #4880-#4922

3) HX220S LR



210S2SP11

Description	m (ft-in)	Boom	8.2 (26' 11")
		Arm	6.30 (20' 8")
Max digging reach	mm (ft-in)	A	15220 (49' 11")
Max digging reach on ground		A'	15120 (49' 7")
Max digging depth		B	11760 (38' 7")
Max digging depth (8 ft level)		B'	11650 (38' 3")
Max vertical wall digging depth		C	9610 (31' 6")
Max digging height		D	12550 (41' 2")
Max dumping height		E	10280 (33' 9")
Min swing radius		F	4870 (16' 0")
Bucket digging force	kN	SAE	72.6
	kgf		7400
	lbf		16310
	kN	ISO	83.4
	kgf		8500
	lbf		18740
Arm digging force	kN	SAE	49.0
	kgf		5000
	lbf		11020
	kN	ISO	50.0
	kgf		5100
	lbf		11240

Machine Serial No. : -#4560, #4880-#4922

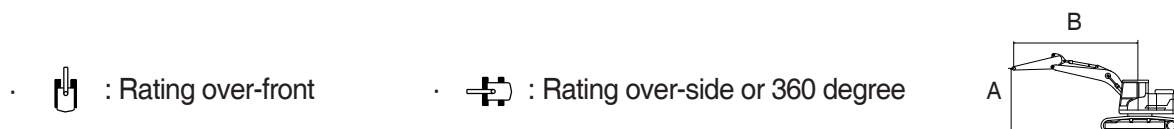
4. WEIGHT











Item	HX210S		HX220S	
	kg	lb	kg	lb
Upperstructure assembly	8950	19730	←	
Main frame weld assembly	2600	5730	←	
Engine assembly	437	963	←	
Main pump assembly	120	265	←	
Main control valve assembly	200	440	←	
Swing motor assembly	190	420	←	
Hydraulic oil tank assembly	240	530	←	
Fuel tank assembly	195	430	←	
Counterweight	3600	7940	←	
Cab assembly	310	680	←	
Lower chassis assembly	8060	17770	8700	19180
Track frame weld assembly	2545	5611	2720	6000
Swing bearing	290	639	←	
Travel motor assembly	305	670	←	
Turning joint	55	120	←	
Track recoil spring	140	309	←	
Idler	151	333	←	
Carrier roller	21	46	←	
Track roller	48	106	←	
Track-chain assembly (600 mm standard triple grouser shoe)	1353	2983	1356	2989
Front attachment assembly (5.68 m boom, 2.92 m arm, 0.87 m³ SAE heaped bucket)	4030	8880	←	
5.68 m boom assembly	1520	3350	←	
2.92 m arm assembly	750	1650	←	
0.92 m³ SAE heaped bucket	765	1690	←	
Boom cylinder assembly	180	400	←	
Arm cylinder assembly	290	640	←	
Bucket cylinder assembly	175	390	←	
Bucket control link assembly	170	370	←	

Machine Serial No. : -#4560, #4880-#4922

5. LIFTING CAPACITIES

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX210S	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5680	2000	3600	600	-	-	-	-	-



Lift-point height (A)		Lift-point radius (B)								At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
												m (ft)
7.5 m (24.6 ft)	kg lb									*5710 *12590	*5710 *12590	5.00 (16.4)
6.0 m (19.7 ft)	kg lb					*5450 *12020	4330 9550			*5520 *12170	3920 8640	6.35 (20.8)
4.5 m (14.8 ft)	kg lb			*6890 *15190	6510 14350	*5800 *12790	4200 9260			4900 10800	3170 6990	7.14 (23.4)
3.0 m (9.8 ft)	kg lb			*8680 *19140	5970 13160	6260 13800	3990 8800	4440 9790	2860 6310	4400 9700	2830 6240	7.55 (24.8)
1.5 m (4.9 ft)	kg lb					6040 13320	3790 8360	4360 9610	2780 6130	4240 9350	2710 5970	7.64 (25.1)
0.0 m (0.0 ft)	kg lb			9190 20260	5450 12020	5910 13030	3670 8090			4370 9630	2770 6110	7.43 (24.4)
-1.5 m (-4.9 ft)	kg lb			9210 20300	5460 12040	5900 13010	3660 8070			4880 10760	3080 6790	6.88 (22.6)
-3.0 m (-9.8 ft)	kg lb	*12380 *27290	10760 23720	*9130 *20130	5600 12350					6190 13650	3880 8550	5.90 (19.4)

Note 1. Lifting capacity are based on ISO 10567.

2. Lifting capacity of the 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.

※ Lifting capacities are based upon a standard machine conditions.

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

Consult your HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.

▲ Failure to comply to the rated load can cause possible personal injury or property damage.

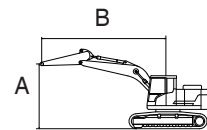
Make adjustments to the rated load as necessary for non-standard configurations.











Machine Serial No. : -#4560, #4880-#4922

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX210S	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5680	2400	3600	600	-	-	-	-	-

·  : Rating over-front

·  : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)								At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
												m (ft)
7.5 m (24.6 ft)	kg lb									*5080 *11200	4920 10850	5.58 (18.3)
6.0 m (19.7 ft)	kg lb					*5000 *11020	4380 9660			*4620 *10190	3500 7720	6.82 (22.4)
4.5 m (14.8 ft)	kg lb			*6340 *13980	*6340 *13980	*5440 *11990	4240 9350	4530 9990	2930 6460	4480 9880	2890 6370	7.55 (24.8)
3.0 m (9.8 ft)	kg lb			*8140 *17950	6060 13360	*6230 *13730	4010 8840	4450 9810	2860 6310	4060 8950	2600 5730	7.94 (26.1)
1.5 m (4.9 ft)	kg lb			9390 20700	5620 12390	6040 13320	3790 8360	4340 9570	2760 6080	3920 8640	2490 5490	8.03 (26.3)
0.0 m (0.0 ft)	kg lb			9160 20190	5420 11950	5880 12960	3650 8050	4270 9410	2690 5930	4020 8860	2540 5600	7.83 (25.7)
-1.5 m (-4.9 ft)	kg lb	*10830 *23880	10370 22860	9130 20130	5390 11880	5840 12870	3610 7960			4430 9770	2790 6150	7.31 (24.0)
-3.0 m (-9.8 ft)	kg lb	*13260 *29230	10570 23300	9250 20390	5500 12130	5930 13070	3680 8110			5420 11950	3400 7500	6.40 (21.0)
-4.5 m (-14.8 ft)	kg lb			*7160 *15790	5790 12760					*6330 *13960	5180 11420	4.89 (16.0)

Note 1. Lifting capacity are based on ISO 10567.

2. Lifting capacity of the 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.

※ **Lifting capacities are based upon a standard machine conditions.**

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

Consult your HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.


▲ **Failure to comply to the rated load can cause possible personal injury or property damage.**

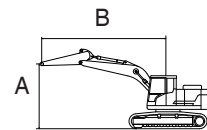
Make adjustments to the rated load as necessary for non-standard configurations.













Machine Serial No. : -#4560, #4880-#4922

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX210S	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5680	2920	3600	600	-	-	-	-	-

·  : Rating over-front

·  : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)										At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
														m (ft)
7.5 m (24.6 ft)	kg							*4450	4450			*3370	*3370	6.26
	lb							*9810	9810			*7430	*7430	(20.5)
6.0 m (19.7 ft)	kg							*4440	*4440			*3100	3080	7.38
	lb							*9790	*9790			*6830	6790	(24.2)
4.5 m (14.8 ft)	kg							*4960	4280	4570	2960	*3020	2590	8.07
	lb							*10930	9440	10080	6530	*6660	5710	(26.5)
3.0 m (9.8 ft)	kg					*7400	6190	*5790	4030	4450	2850	*3070	2340	8.43
	lb					*16310	13650	*12760	8880	9810	6280	*6770	5160	(27.7)
1.5 m (4.9 ft)	kg					*9130	5670	6050	3790	4320	2730	*3250	2240	8.51
	lb					*20130	12500	13340	8360	9520	6020	*7170	4940	(27.9)
0.0 m (0.0 ft)	kg			*5920	*5920	9140	5390	5850	3610	4220	2640	*3590	2280	8.32
	lb			*13050	*13050	20150	11880	12900	7960	9300	5820	*7910	5030	(27.3)
-1.5 m (-4.9 ft)	kg	*6500	*6500	*10400	10130	9040	5300	5770	3530	4190	2610	3950	2470	7.84
	lb	*14330	*14330	*22930	22330	19930	11680	12720	7780	9240	5750	8710	5450	(25.7)
-3.0 m (-9.8 ft)	kg	*11120	*11120	*14170	10310	9110	5360	5800	3560			4680	2920	7.00
	lb	*24520	*24520	*31240	22730	20080	11820	12790	7850			10320	6440	(23.0)
-4.5 m (-14.8 ft)	kg			*11620	10680	*8190	5570					*6080	4080	5.65
	lb			*25620	23550	*18060	12280					*13400	8990	(18.5)

Note 1. Lifting capacity are based on ISO 10567.

2. Lifting capacity of the 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.

※ **Lifting capacities are based upon a standard machine conditions.**

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

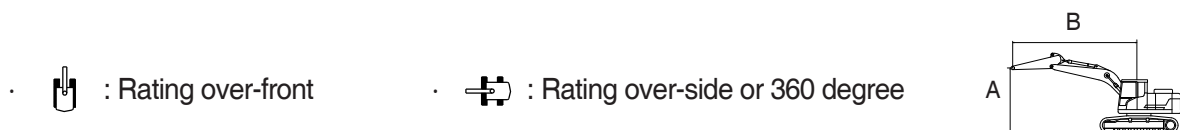
Consult your HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.











▲ **Failure to comply to the rated load can cause possible personal injury or property damage.**

Make adjustments to the rated load as necessary for non-standard configurations.

Machine Serial No. : -#4560, #4880-#4922

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX220S	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5680	2000	3600	600	-	-	-	-	-



Lift-point height (A)		Lift-point radius (B)								At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
												m (ft)
7.5 m (24.6 ft)	kg									*5710	*5710	5.00
	lb									*12590	*12590	(16.4)
6.0 m (19.7 ft)	kg					*5450	4820			*5520	4370	6.35
	lb					*12020	10630			*12170	9630	(20.8)
4.5 m (14.8 ft)	kg			*6880	*6880	*5800	4690			5520	3550	7.14
	lb			*15170	*15170	*12790	10340			12170	7830	(23.4)
3.0 m (9.8 ft)	kg			*8680	6730	*6530	4470	5010	3200	4960	3170	7.55
	lb			*19140	14840	*14400	9850	11050	7050	10930	6990	(24.8)
1.5 m (4.9 ft)	kg					6860	4270	4930	3120	4800	3040	7.64
	lb					15120	9410	10870	6880	10580	6700	(25.1)
0.0 m (0.0 ft)	kg			*10510	6190	6730	4150			4950	3120	7.43
	lb			*23170	13650	14840	9150			10910	6880	(24.4)
-1.5 m (-4.9 ft)	kg			*10220	6210	6720	4140			5530	3470	6.88
	lb			*22530	13690	14820	9130			12190	7650	(22.6)
-3.0 m (-9.8 ft)	kg	*12380	*12380	*9130	6350					*6670	4360	5.91
	lb	*27290	*27290	*20130	14000					*14700	9610	(19.4)

Note 1. Lifting capacity are based on ISO 10567.

2. Lifting capacity of the 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.

※ Lifting capacities are based upon a standard machine conditions.

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

Consult your HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.


▲ Failure to comply to the rated load can cause possible personal injury or property damage.

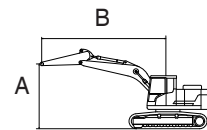
Make adjustments to the rated load as necessary for non-standard configurations.











Machine Serial No. : -#4560, #4880-#4922

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX220S	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5680	2400	3600	600	-	-	-	-	-

·  : Rating over-front

·  : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)								At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
												m (ft)
7.5 m (24.6 ft)	kg									*5080	*5080	5.58
	lb									*11200	*11200	(18.3)
6.0 m (19.7 ft)	kg					*5000	4870			*4620	3910	6.81
	lb					*11020	10740			*10190	8620	(22.4)
4.5 m (14.8 ft)	kg			*6340	*6340	*5440	4720	*4990	3280	*4490	3240	7.55
	lb			*13980	*13980	*11990	10410	*11000	7230	*9900	7140	(24.8)
3.0 m (9.8 ft)	kg			*8130	6830	*6220	4490	5020	3200	*4580	2920	7.94
	lb			*17920	15060	*13710	9900	11070	7050	*10100	6440	(26.1)
1.5 m (4.9 ft)	kg			*9700	6370	6870	4260	4910	3100	4430	2810	8.03
	lb			*21380	14040	15150	9390	10820	6830	9770	6190	(26.3)
0.0 m (0.0 ft)	kg			*10400	6170	6710	4120	4840	3040	4550	2870	7.83
	lb			*22930	13600	14790	9080	10670	6700	10030	6330	(25.7)
-1.5 m (-4.9 ft)	kg	*10820	*10820	*10330	6140	6660	4080			5020	3140	7.31
	lb	*23850	*23850	*22770	13540	14680	8990			11070	6920	(24.0)
-3.0 m (-9.8 ft)	kg	*13260	12250	*9500	6250	6750	4160			6160	3830	6.41
	lb	*29230	27010	*20940	13780	14880	9170			13580	8440	(21.0)
-4.5 m (-14.8 ft)	kg			*7160	6550					*6330	5840	4.89
	lb			*15790	14440					*13960	12870	(16.0)

Note 1. Lifting capacity are based on ISO 10567.

2. Lifting capacity of the 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.

※ **Lifting capacities are based upon a standard machine conditions.**

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

Consult your HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.

▲ **Failure to comply to the rated load can cause possible personal injury or property damage.**

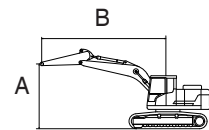
Make adjustments to the rated load as necessary for non-standard configurations.













Machine Serial No. : -#4560, #4880-#4922

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX220S	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5680	2920	3600	600	-	-	-	-	-

·  : Rating over-front

·  : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)										At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
														m (ft)
7.5 m (24.6 ft)	kg lb							*4450 *9810	*4450 *9810			*3370 *7430	*3370 *7430	6.26 (20.5)
6.0 m (19.7 ft)	kg lb							*4440 *9790	*4440 *9790			*3100 *6830	*3100 *6830	7.38 (24.2)
4.5 m (14.8 ft)	kg lb							*4950 *10910	4770 10520	*4700 *10360	3310 7300	*3020 *6660	2900 6390	8.07 (26.5)
3.0 m (9.8 ft)	kg lb					*7390 *16290	6960 15340	*5790 *12760	4520 9960	5030 11090	3200 7050	*3070 *6770	2640 5820	8.43 (27.7)
1.5 m (4.9 ft)	kg lb					*9130 *20130	6430 14180	*6670 *14700	4270 9410	4890 10780	3080 6790	*3250 *7170	2530 5580	8.51 (27.9)
0.0 m (0.0 ft)	kg lb			*5920 *13050	*5920 *13050	*10130 *22330	6130 13510	6680 14730	4090 9020	4790 10560	2990 6590	*3590 *7910	2580 5690	8.32 (27.3)
-1.5 m (-4.9 ft)	kg lb	*6500 *14330	*6500 *14330	*10390 *22910	*10390 *22910	*10340 *22800	6050 13340	6590 14530	4010 8840	4750 10470	2950 6500	*4200 *9260	2790 6150	7.84 (25.7)
-3.0 m (-9.8 ft)	kg lb	*11110 *24490	*11110 *24490	*14180 *31260	11990 26430	*9820 *21650	6110 13470	6620 14590	4040 8910			5310 11710	3300 7280	7.01 (23.0)
-4.5 m (-14.8 ft)	kg lb			*11620 *25620	*11620 *25620	*8200 *18080	6330 13960					*6080 *13400	4600 10140	5.66 (18.6)

Note 1. Lifting capacity are based on ISO 10567.

2. Lifting capacity of the 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.

※ **Lifting capacities are based upon a standard machine conditions.**

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

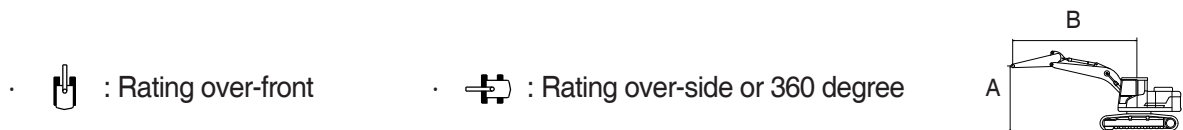
Consult your HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.























▲ **Failure to comply to the rated load can cause possible personal injury or property damage.**

Make adjustments to the rated load as necessary for non-standard configurations.

Machine Serial No. : -#4560, #4880-#4922

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX220S LR	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		8200	6300	5300	800	-	-	-	-	-



Lift-point height (A)		Lift-point radius (B)																		At max. reach				
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		9.0 m (29.5 ft)		10.5 m (34.4 ft)		12.0 m (39.4 ft)		13.5 m (44.3 ft)		Capacity		Reach		
																								m (ft)
10.5m 34.4ft	kg lb													*1210 *2670	*1210 *2670						*900 *1980	*900 *1980	10.88 (35.7)	
9.0m 29.5ft	kg lb																					*850 *1870	*850 *1870	11.94 (39.2)
7.5m 24.6ft	kg lb													*1910 *4210	*1910 *4210	*1440 *3170	*1440 *3170				*820 *1810	*820 *1810	12.73 (41.8)	
6.0m 19.7ft	kg lb													*2030 *4480	*2030 *4480	*1810 *3990	*1810 *3990				*820 *1810	*820 *1810	13.31 (43.7)	
4.5m 14.8ft	kg lb											*2330 *5140	*2330 *5140	*2220 *4890	*2220 *4890	*2110 *4650	1900 4190	*1080 *2380	*1080 *2380	*830 *1830	*830 *1830	13.70 (45.0)		
3.0m 9.8ft	kg lb									*3030 *6680	*3030 *6680	*2680 *5910	*2680 *5910	*2450 *5400	2320 5110	*2300 *5070	1820 4010	*1370 *3020	*1370 *3020	*860 *1900	*860 *1900	13.92 (45.7)		
1.5m 4.9ft	kg lb			*2840 *6260	*2840 *6260	*6410 *14130	*6410 *14130	*4540 *10010	*4540 *10010	*3600 *7940	*3600 *7940	*3050 *6720	2800 6170	*2700 *5950	2180 4810	*2470 *5450	1730 3810	*1520 *3350	1380 3040	*910 *2010	*910 *2010	13.97 (45.8)		
0.0m 0.0ft	kg lb			*2450 *5400	*2450 *5400	*6310 *13910	*6310 *13910	*5340 *11770	4570 10080	*4120 *9080	3380 7450	*3400 *7500	2600 5730	*2950 *6500	2060 4540	*2640 *5820	1650 3640	*1500 *3310	1330 2930	*980 *2160	*980 *2160	13.85 (45.5)		
-1.5m -4.9ft	kg lb	*2020 *4450	*2020 *4450	*3010 *6640	*3010 *6640	*5640 *12430	*5640 *12430	*5920 *13050	4250 9370	*4540 *10010	3160 6970	*3710 *8180	2450 5400	*3160 *6970	1950 4300	2640 5820	1580 3480	*1200 *2650	*1200 *2650	*1080 *2380	*1080 *2380	13.57 (44.5)		
-3.0m -9.8ft	kg lb	*2900 *6390	*2900 *6390	*3830 *8440	*3830 *8440	*6080 *13400	*6080 *13400	*6270 *13820	4080 8990	*4830 *10650	3010 6640	3910 8620	2340 5160	3140 6920	1880 4140	2600 5730	1540 3400			*1220 *2690	*1220 *2690	13.11 (43.0)		
-4.5m -14.8ft	kg lb	*3820 *8420	*3820 *8420	*4830 *10650	*4830 *10650	*7050 *15540	6110 13470	*6400 *14110	4020 8860	*4970 *10960	2950 6500	3850 8490	2290 5050	3110 6860	1850 4080	*2410 *5310	1530 3370			*1420 *3130	*1420 *3130	12.45 (40.9)		
-6.0m -19.7ft	kg lb	*4830 *10650	*4830 *10650	*6000 *13230	*6000 *13230	*8460 *18650	6210 13690	*6300 *13890	4050 8930	*4940 *10890	2950 6500	3860 8510	2300 5070	3130 6900	1860 4100					*1750 *3860	1650 3640	11.56 (37.9)		
-7.5m -24.6ft	kg lb	*5980 *13180	*5980 *13180	*7440 *16400	*7440 *16400	*7880 *17370	6400 14110	*5940 *13100	4160 9170	*4690 *10340	3030 6680	*3780 *8330	2370 5220							*2330 *5140	1980 4370	10.37 (34.0)		
-9.0m -29.5ft	kg lb			*9320 *20550	*9320 *20550	*6820 *15040	6700 14770	*5210 *11490	4360 9610	*4070 *8970	3200 7050									*3240 *7140	2620 5780	8.77 (28.8)		

Note 1. Lifting capacity are based on ISO 10567.

2. Lifting capacity of the 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.

※ Lifting capacities are based upon a standard machine conditions.

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

Consult your HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.

▲ Failure to comply to the rated load can cause possible personal injury or property damage.

Make adjustments to the rated load as necessary for non-standard configurations.

6. BUCKET SELECTION GUIDE

1) HX210S, 3600 KG COUNTERWEIGHT



General bucket

Heavy duty
(without side cutter)

Rock heavy duty



Long reach

Type	Capacity		Width	Weight	Tooth	MONO		
						Recommendation		
	SAE Heaped	CECE heaped	Without side cutter			5.68 m (18' 8") Boom		
				m³ (yd³)	m³ (yd³)	mm (in)	kg (lb)	EA
General bucket	0.92 (1.20)	0.80 (1.05)	1,082 (42.6')	725 (1,600)	5	●	◐	■
	1.10 (1.44)	0.96 (1.26)	1,320 (52.0")	830 (1,830)	5	■	■	▲
	1.20 (1.57)	1.10 (1.44)	1,332 (52.4")	810 (1,790)	5	■	▲	▲
Heavy duty	0.90 (1.18)	0.80 (1.05)	1,082 (42.6")	830 (1,830)	5	●	◐	■
Rock heavy duty	0.87 (1.14)	0.75 (0.98)	1,140 (44.9")	900 (1,980)	5	●	◐	■
	1.20 (1.57)	1.00 (1.31)	1,410 (55.5")	1,030 (2,270)	5	■	▲	X

●	Applicable for materials with density of 2100 kg/m ³ (3500 lb/yd ³) or less
◐	Applicable for materials with density of 1800 kg/m ³ (3000 lb/yd ³) or less
■	Applicable for materials with density of 1500 kg/m ³ (2500 lb/yd ³) or less
▲	Applicable for materials with density of 1200 kg/m ³ (2000 lb/yd ³) or less
X	Not recommended

※ These recommendations are for general conditions and average use.

Work tools and ground conditions have effects on machine performance.

Select an optimum combination according to the working conditions and the type of work that is being done.

Consult your HD Hyundai Construction Equipment dealer for information on selecting the correct boom—arm—bucket combination.

Machine Serial No. : -#4560, #4880-#4922

2) HX210S, 4200 KG COUNTERWEIGHT



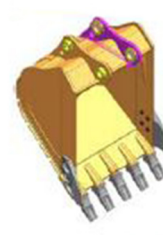
General bucket



Heavy duty
(without side cutter)



Rock heavy duty



Long reach

Type	Capacity		Width	Weight	Tooth	MONO		
						Recommendation		
	SAE Heaped	CECE heaped	Without side cutter			5.68 m (18' 8") Boom		
	m ³ (yd ³)	m ³ (yd ³)	mm (in)	kg (lb)	EA	2.10 m (6' 7") Arm	2.4 m (7' 10") Arm	2.92 m (9' 7") Arm
General bucket	0.92 (1.20)	0.80 (1.05)	1,082 (42.6')	725 (1,600)	5	●	●	◐
	1.10 (1.44)	0.96 (1.26)	1,320 (52.0")	830 (1,830)	5	◐	■	■
	1.20 (1.57)	1.10 (1.44)	1,332 (52.4")	810 (1,790)	5	◐	■	▲
Heavy duty	0.90 (1.18)	0.80 (1.05)	1,082 (42.6")	830 (1,830)	5	●	●	◐
Rock heavy duty	0.87 (1.14)	0.75 (0.98)	1,140 (44.9")	900 (1,980)	5	●	●	◐
	1.20 (1.57)	1.00 (1.31)	1,410 (55.5")	1,030 (2,270)	5	■	■	▲

●	Applicable for materials with density of 2100 kg/m ³ (3500 lb/yd ³) or less
◐	Applicable for materials with density of 1800 kg/m ³ (3000 lb/yd ³) or less
■	Applicable for materials with density of 1500 kg/m ³ (2500 lb/yd ³) or less
▲	Applicable for materials with density of 1200 kg/m ³ (2000 lb/yd ³) or less
X	Not recommended

※ These recommendations are for general conditions and average use.

Work tools and ground conditions have effects on machine performance.

Select an optimum combination according to the working conditions and the type of work that is being done.

Consult your HD Hyundai Construction Equipment dealer for information on selecting the correct boom—arm—bucket combination.

Machine Serial No. : -#4560, #4880-#4922

3) HX220S, 3600 KG COUNTERWEIGHT



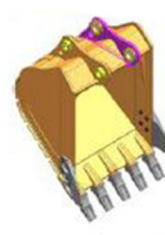
General bucket



Heavy duty
(without side cutter)



Rock heavy duty



Long reach

Type	Capacity		Width	Weight	Tooth	MONO		
			Without side cutter			Recommendation		
						5.68 m (18' 8") Boom		
	SAE Heaped	CECE heaped	mm (in)	kg (lb)	EA	2.10 m (6' 7")Arm	2.4 m (7' 10") Arm	2.92 m (9' 7") Arm
General bucket	0.92 (1.20)	0.80 (1.05)	1,082 (42.6')	725 (1,600)	5	●	●	◐
	1.10 (1.44)	0.96 (1.26)	1,320 (52.0")	830 (1,830)	5	◐	◐	■
	1.20 (1.57)	1.10 (1.44)	1,332 (52.4")	810 (1,790)	5	◐	■	▲
Heavy duty	0.90 (1.18)	0.80 (1.05)	1,082 (42.6")	830 (1,830)	5	●	●	◐
Rock heavy duty	0.87 (1.14)	0.75 (0.98)	1,140 (44.9")	900 (1,980)	5	●	●	◐
	1.20 (1.57)	1.00 (1.31)	1,410 (55.5")	1,030 (2,270)	5	■	■	▲

●	Applicable for materials with density of 2100 kg/m ³ (3500 lb/yd ³) or less
◐	Applicable for materials with density of 1800 kg/m ³ (3000 lb/yd ³) or less
■	Applicable for materials with density of 1500 kg/m ³ (2500 lb/yd ³) or less
▲	Applicable for materials with density of 1200 kg/m ³ (2000 lb/yd ³) or less
X	Not recommended

※ These recommendations are for general conditions and average use.

Work tools and ground conditions have effects on machine performance.

Select an optimum combination according to the working conditions and the type of work that is being done.

Consult your HD Hyundai Construction Equipment dealer for information on selecting the correct boom—arm—bucket combination.

Machine Serial No. : -#4560, #4880-#4922

4) HX220S, 4200 KG COUNTERWEIGHT



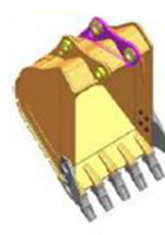
General bucket



Heavy duty
(without side cutter)



Rock heavy duty



Long reach

Type	Capacity		Width	Weight	Tooth	MONO		
	SAE Heaped	CECE heaped	Without side cutter			Recommendation		
						5.68 m (18' 8") Boom		
	m ³ (yd ³)	m ³ (yd ³)	mm (in)	kg (lb)	EA	2.10 m (6' 7") Arm	2.4 m (7' 10") Arm	2.92 m (9' 7") Arm
General bucket	0.92 (1.20)	0.80 (1.05)	1,082 (42.6")	725 (1,600)	5	●	●	●
	1.10 (1.44)	0.96 (1.26)	1,320 (52.0")	830 (1,830)	5	●	◐	■
	1.20 (1.57)	1.10 (1.44)	1,332 (52.4")	810 (1,790)	5	◐	◐	■
Heavy duty	0.90 (1.18)	0.80 (1.05)	1,082 (42.6")	830 (1,830)	5	●	●	●
Rock heavy duty	0.87 (1.14)	0.75 (0.98)	1,140 (44.9")	900 (1,980)	5	●	●	●
	1.20 (1.57)	1.00 (1.31)	1,410 (55.5")	1,030 (2,270)	5	◐	■	■

●	Applicable for materials with density of 2100 kg/m ³ (3500 lb/yd ³) or less
◐	Applicable for materials with density of 1800 kg/m ³ (3000 lb/yd ³) or less
■	Applicable for materials with density of 1500 kg/m ³ (2500 lb/yd ³) or less
▲	Applicable for materials with density of 1200 kg/m ³ (2000 lb/yd ³) or less
X	Not recommended

※ These recommendations are for general conditions and average use.

Work tools and ground conditions have effects on machine performance.

Select an optimum combination according to the working conditions and the type of work that is being done.

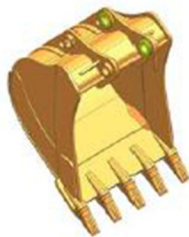
Consult your HD Hyundai Construction Equipment dealer for information on selecting the correct boom—arm—bucket combination.

Machine Serial No. : -#4560, #4880-#4922

5) HX220S, 5300 KG COUNTERWEIGHT



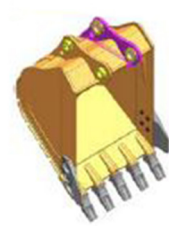
General bucket



Heavy duty
(without side cutter)



Rock heavy duty



Long reach

Type	Capacity		Width	Weight	Tooth	MONO			L/Reach
						Recommendation			
	SAE Heaped	CECE heaped	Without side cutter		5.68 m (18' 8") Boom	8.2 m (26' 11") Boom			
							m³ (yd³)	m³ (yd³)	mm (in)
General bucket	0.92 (1.20)	0.80 (1.05)	1,082 (42.6')	725 (1,600)	5	●	●	●	X
	1.10 (1.44)	0.96 (1.26)	1,320 (52.0")	830 (1,830)	5	●	●	●	X
	1.20 (1.57)	1.10 (1.44)	1,332 (52.4")	810 (1,790)	5	●	●	◐	X
Heavy duty	0.90 (1.18)	0.80 (1.05)	1,082 (42.6")	830 (1,830)	5	●	●	●	X
Rock heavy duty	0.87 (1.14)	0.75 (0.98)	1,140 (44.9")	900 (1,980)	5	●	●	●	X
	1.20 (1.57)	1.00 (1.31)	1,410 (55.5")	1,030 (2,270)	5	●	◐	◐	X
LR	0.52 (0.68)	0.45 (0.59)	935 (36.8")	460 (1,010)	5	X	X	X	■

●	Applicable for materials with density of 2100 kg/m ³ (3500 lb/yd ³) or less
◐	Applicable for materials with density of 1800 kg/m ³ (3000 lb/yd ³) or less
■	Applicable for materials with density of 1500 kg/m ³ (2500 lb/yd ³) or less
▲	Applicable for materials with density of 1200 kg/m ³ (2000 lb/yd ³) or less
X	Not recommended

※ These recommendations are for general conditions and average use.

Work tools and ground conditions have effects on machine performance.

Select an optimum combination according to the working conditions and the type of work that is being done.

Consult your HD Hyundai Construction Equipment dealer for information on selecting the correct boom—arm—bucket combination.

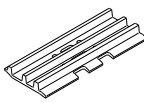
Machine Serial No. : -#4560, #4880-#4922

7. UNDERCARRIAGE

1) TRACKS

X-leg type center frame is integrally welded with reinforced box-section track frames. The design includes dry tracks, lubricated rollers, idlers, sprockets, hydraulic track adjusters with shock absorbing springs, and assembled track-type tractor shoes with triple grousers.

2) TYPES OF SHOES

Model	Shapes		Triple grouser			
						
HX210S	Shoe width	mm (in)	600 (24)	-	-	800 (32)
	Operating weight	kg (lb)	20830 (45920)	-	-	21380 (47140)
	Ground pressure	kgf/cm ² (psi)	0.48 (6.81)	-	-	0.42 (5.99)
	Overall width	mm (ft-in)	2800 (9' 2")	-	-	3000 (9' 10")
HX220S	Shoe width	mm (in)	600 (24)★	600 (24)	700 (28)	800 (32)
	Operating weight	kg (lb)	21260 (46870)	21450 (47290)	21750 (47950)	22040 (48590)
	Ground pressure	kgf/cm ² (psi)	0.45 (6.45)	0.46 (6.51)	0.40 (5.56)	0.35 (5.02)
	Overall width	mm (ft-in)	2990 (9' 10")	2800 (9' 2")	3090 (10' 2")	3190 (10' 6")

★ : 8.5 T

3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item		Quantity
Carrier rollers		2 EA
Track rollers	HX210S	7 EA
	HX220S	9 EA
Track shoes	HX210S	46 EA
	HX220S	49 EA

Machine Serial No. : -#4560, #4880-#4922

4) SELECTION OF TRACK SHOE

Suitable track shoes should be selected according to operating conditions.

Method of selecting shoes

Confirm the category from the list of applications in **table 2**, then use **table 1** to select the shoe. Wide shoes (categories B and C) have limitations on applications. Before using wide shoes, check the precautions, then investigate and study the operating conditions to confirm if these shoes are suitable.

Select the narrowest shoe possible to meet the required flotation and ground pressure.

Application of wider shoes than recommendations will cause unexpected problem such as bending of shoes, crack of link, breakage of pin, loosening of shoe bolts and the other various problems.

※ Table 1

Track shoe	Specification	Category
600 mm triple grouser	Standard	A
700 mm triple grouser	Option	B
800 mm triple grouser	Option	C

※ Table 2

Category	Applications	Precautions
A	Rocky ground, river beds, normal soil	<ul style="list-style-type: none">Travel at low speed on rough ground with large obstacles such as boulders or fallen trees or a wide range of general civil engineering work
B	Normal soil, soft ground	<ul style="list-style-type: none">These shoes cannot be used on rough ground with large obstacles such as boulders or fallen treesTravel at high speed only on flat groundTravel slowly at low speed if it is impossible to avoid going over obstacles
C	Extremely soft ground (swampy ground)	<ul style="list-style-type: none">Use the shoes only in the conditions that the machine sinks and it is impossible to use the shoes of category A or BThese shoes cannot be used on rough ground with large obstacles such as boulders or fallen treesTravel at high speed only on flat groundTravel slowly at low speed if it is impossible to avoid going over obstacles

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	HD Hyundai Construction Equipment 6BTAA-5.9 (HM5.9)
Type	4-cycle, turbocharged, charge air cooled, mechanical controlled diesel engine
Cooling method	Water cooled
Number of cylinders and arrangement	6 cylinders, in-line
Firing order	1-5-3-6-2-4
Combustion chamber type	Direct injection type
Cylinder bore×stroke	102 × 120 mm (4.02 " × 4.72 ")
Piston displacement	5900 cc (360 cu in)
Compression ratio	17.3 : 1
Rated gross horse power (SAE J1995)	148 Hp at 2000rpm (110 kW at 2000 rpm)
Rated net horse power (SAE J1349)	145 Hp at 2000 rpm (108 kW at 2000 rpm)
Maximum torque at 1300 rpm	64 kgf · m (463 lbf · ft)
Engine oil quantity	14 ℓ (3.8 U.S. gal) : -#1289 20 ℓ (5.3 U.S. gal) : #1290-
Dry weight	437 kg (963 lb)
High idling speed	2250 + 50 rpm
Low idling speed	800 ± 100 rpm
Rated fuel consumption	95 g/Hp · hr at 1200 rpm
Starting motor	Lucas 24V
Alternator	Lucas 24V-75A
Battery	2 × 12V × 100Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 117 cc/rev
Maximum pressure	350 kgf/cm ² (4978 psi)
Rated oil flow	2 × 234 ℓ /min (61.8 U.S. gpm/ 51.4 U.K. gpm)
Rated speed	2000 rpm

Machine Serial No. : -#4560, #4880-#4922

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15 cc/rev
Maximum pressure	40 kgf/cm ² (568 psi)
Rated oil flow	30 ℓ /min (7.9 U.S. gpm/6.7 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spools mono-block
Operating method	Hydraulic pilot system
Main relief valve pressure	350 kgf/cm ² (4978 psi)
Overload relief valve pressure	400 kgf/cm ² (5689 psi)

5) SWING MOTOR

Item	Specification
Type	Two fixed displacement axial piston motor
Capacity	142.8 cc/rev
Relief pressure	265 kgf/cm ² (3894 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	63.3 kgf/cm ² (470.8 lbf · ft)
Brake release pressure	20.9~35.5 kgf/cm ² (297~505 psi)
Reduction gear type	2 - stage planetary
Swing speed	12.2rpm

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	350 kgf/cm ² (4978 psi)
Reduction gear type	2-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	13 kgf/cm ² (182 psi)
Braking torque	65.1 kgf · m (470 lbf · ft)

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7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5 kgf/cm ² (92 psi)
	Maximum	26 kgf/cm ² (370 psi)
Single operation stroke	Lever	61 mm (2.4 in)
	Pedal	123 mm (4.84 in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	Ø 120 × Ø 85 × 1290 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	Ø 140 × Ø 100 × 1510 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø 120 × Ø 85 × 1055 mm
	Cushion	Extend only

※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

※ Discoloration does not cause any harmful effect on the cylinder performance.

9) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
HX210S	Standard	600 mm (24")	0.48 kgf/cm ² (6.81 psi)	46	2800 mm (9' 2")
	Option	800 mm (32")	0.42 kgf/cm ² (5.99 psi)	46	3000 mm (9' 10")
HX220S	Standard	600 mm (24")	0.45 kgf/cm ² (6.45 psi)	49	2990 mm (9' 10")
	Option	600 mm (24")	0.46 kgf/cm ² (6.51 psi)	49	2800 mm (9' 2")
		700 mm (28")	0.40 kgf/cm ² (5.56 psi)	49	3090 mm (10' 2")
		800 mm (32")	0.35 kgf/cm ² (5.02 psi)	49	3190 mm (10' 6")

10) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
HX210S	STD	0.92 m ³ (1.20 yd ³)	0.80 m ³ (1.05 yd ³)	5	1150 mm (45.3")	1270 mm (50.0")
HX220S	OPT	1.20 m ³ (1.57 yd ³)	1.00 m ³ (1.31 yd ³)	5	1400 mm (55.1")	1520 mm (59.8")
		◆ 0.90 m ³ (1.18 yd ³)	0.80 m ³ (1.05 yd ³)	5	1090 mm (42.9")	—

◆ : Heavy duty bucket

9. RECOMMENDED OILS

HD Hyundai Construction Equipment genuine lubricating oils have been developed to offer the best performance and service life for your equipment. These oils have been tested according to the specifications of HD Hyundai Construction Equipment and, therefore, will meet the highest safety and quality requirements. We recommend that you use only HD Hyundai Construction Equipment genuine lubricating oils and grease officially approved by HD Hyundai Construction Equipment.

Service point	Kind of fluid	Capacity ℓ (U.S. gal)	Ambient temperature °C (°F)								
			-50 (-58)	-30 (-22)	-20 (-4)	-10 (14)	0 (32)	10 (50)	20 (68)	30 (86)	40 (104)
Engine oil pan	Engine oil ★ ²	14 (3.8) : -#1289 20 (5.3) : #1290-	★SAE 0W-40								
			★SAE 0W-30								
					SAE 5W-30						
					SAE 10W-30						
					SAE 15W-40						
Swing drive	Gear oil	6.2 (1.6)	★SAE 75W-90								
Final drive		4.5 × 2 (1.2 × 2)					SAE 80W-90				
Hydraulic tank	Hydraulic oil	Tank : 160 (42.3) System : 275 (72.6)	★ISO VG 15								
					ISO VG 32						
					ISO VG 46						
					ISO VG 68						
Fuel tank	Diesel fuel	340 (89.8)	★ASTM D975 NO.1								
					ASTM D975 NO.2						
Fitting (grease nipple)	Grease	As required	★NLGI NO.1								
					NLGI NO.2						
Radiator (reservoir tank)	Mixture of antifreeze and soft water★ ¹	31 (8.2)	Ethylene glycol base permanent type (50 : 50)								
			★Ethylene glycol base permanent type (60 : 40)								

SAE : Society of Automotive Engineers

API : American Petroleum Institute

ISO : International Organization for Standardization

NLGI : National Lubricating Grease Institute

ASTM : American Society of Testing and Material

★ : Cold region

Russia, CIS, Mongolia

★¹ : Soft water

City water or distilled water

★² : Meets or exceeds

API CI-4 grade

※ Using any lubricating oils other than HD Hyundai Construction Equipment genuine products may lead to a deterioration of performance and cause damage to major components.

※ Do not mix HD Hyundai Construction Equipment genuine oil with any other lubricating oil as it may result in damage to the systems of major components.

※ For HD Hyundai Construction Equipment genuine lubricating oils and grease for use in regions with extremely low temperatures, please contact HD Hyundai Construction Equipment dealers.