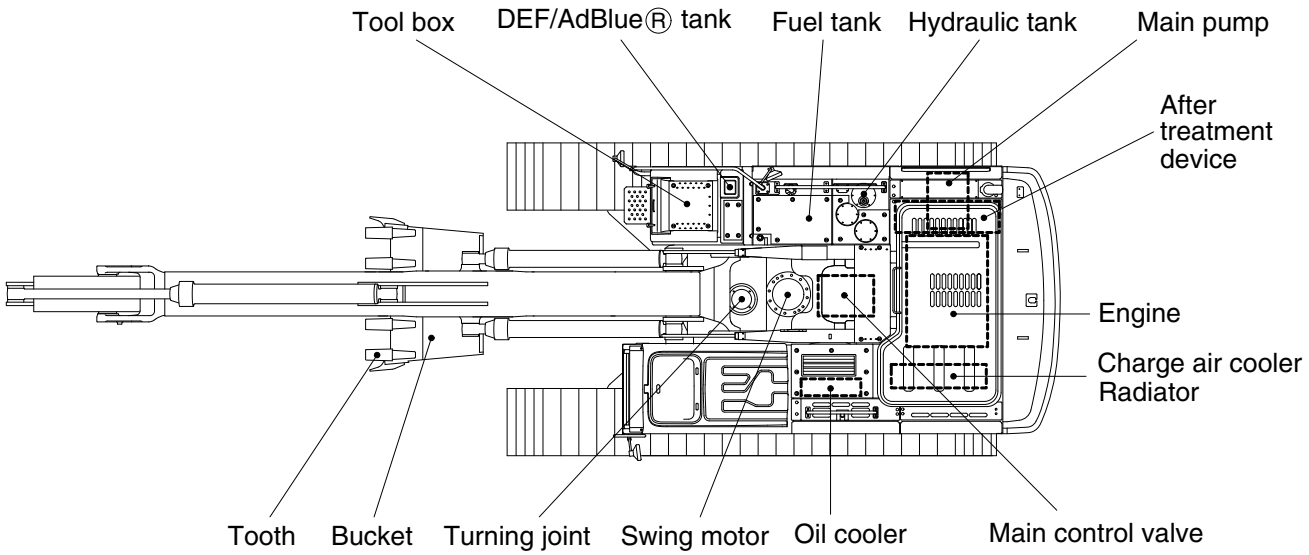
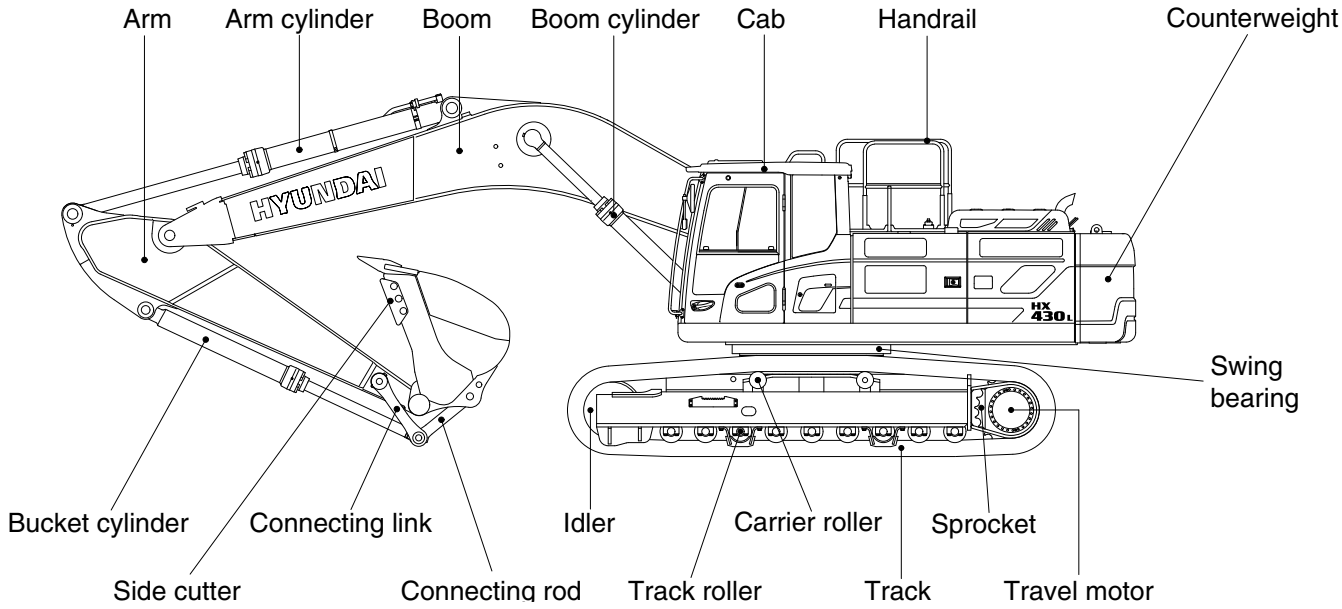
1. MAJOR COMPONENT



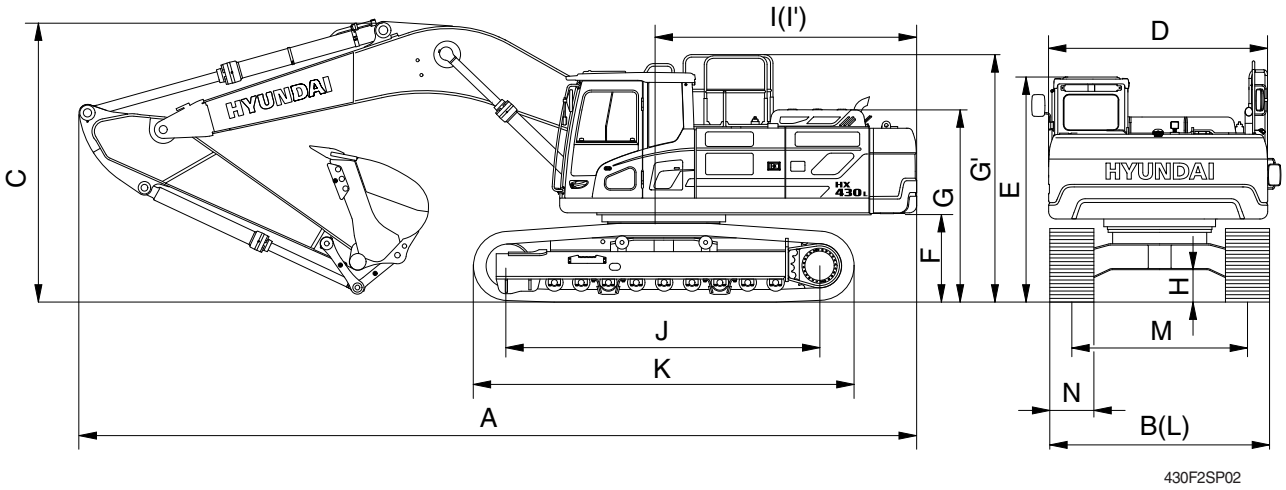


430F2SP01

2. SPECIFICATIONS

1) HX430 L

· 6.5 m (21' 4") BOOM and 3.2 m (10' 6") ARM

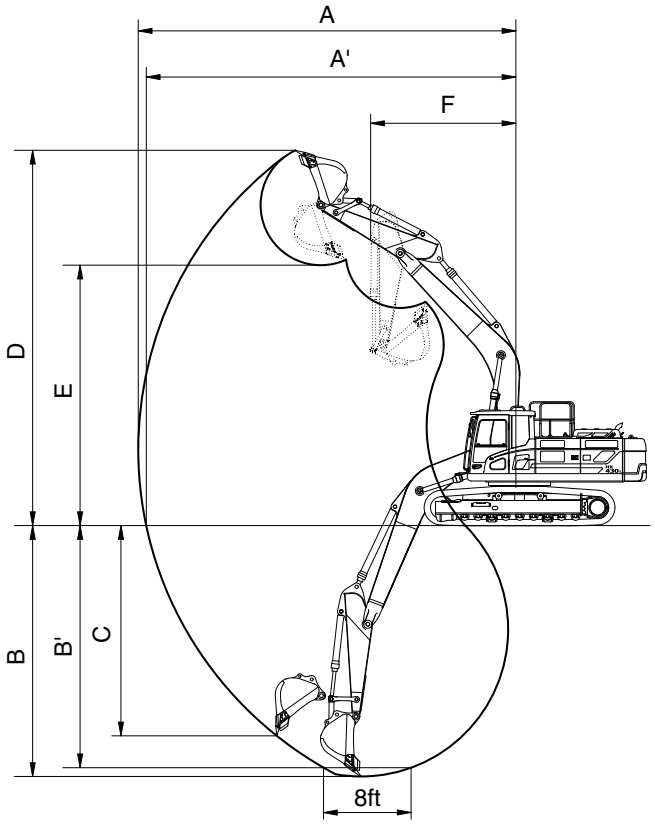


430F2SP02

Description		Unit	Specification
Operating weight		kg (lb)	44120 (97270)
Bucket capacity (SAE heaped), standard		m^3 (yd^3)	1.90 (2.49)
Overall length	A	mm (ft-in)	11400 (37' 5")
Overall width, with 600 mm shoe	B		3340 (10'11")
Overall height	C		3630 (11' 11")
Superstructure width	D		3095 (10 ' 2")
Overall height of cab	E		3240 (10' 8")
Ground clearance of counterweight	F		1295 (4' 3")
Overall height of engine hood	G		2755 (9' 0")
Overall height of handrail	G'		3445 (11' 4")
Minimum ground clearance	H		565 (1' 10")
Rear-end distance	I		3555 (11' 8")
Rear-end swing radius	I'		3615 (11' 10")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5462 (17' 11")
Undercarriage width	L		3340 (10' 11")
Track gauge	M		2740 (9' 0")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.0/5.3 (1.9/3.3)
Swing speed		rpm	9.2
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm^2(psi)	0.76 (0.81)
Max traction force		kgf (lbf)	33500 (73854)

3. WORKING RANGE

1) HX430 L [6.5 m (21' 4") BOOM]



430F2SP03

Description		2.6 m (8' 6") Arm	3.2 m (10' 6") Arm
Max digging reach	A	10750 mm (35' 3")	11160 mm (36' 7")
Max digging reach on ground	A'	10520 mm (34' 6")	10930 mm (35' 10")
Max digging depth	B	6910 mm (22' 8")	7500 mm (24' 7")
Max digging depth (8ft level)	B'	6730 mm (22' 1")	7350 mm (24' 1")
Max vertical wall digging depth	C	5100 mm (16' 9")	5440 mm (17' 10")
Max digging height	D	10390 mm (34' 1")	10290 mm (33' 9")
Max dumping height	E	7250 mm (23' 9")	7200 mm (23' 7")
Min swing radius	F	4540 mm (14' 11")	4490 mm (14' 9")
Bucket digging force	SAE	201.0 [219.3] kN	201.0 [219.3] kN
		20500 [22360] kgf	20500 [22360] kgf
		45190 [49300] lbf	45190 [49300] lbf
	ISO	228.5 [249.3] kN	228.5 [249.3] kN
		23300 [25420] kgf	23300 [25420] kgf
		51370 [56040] lbf	51370 [56040] lbf
Arm crowd force	SAE	180.7 [197.2] kN	160.8 [175.4] kN
		18430 [20110] kgf	16400 [17890] kgf
		40630 [44330] lbf	36160 [39440] lbf
	ISO	188.0 [205.1] kN	165.7 [180.8] kN
		19170 [20910] kgf	16900 [18440] kgf
		42260 [46100] lbf	37260 [40650] lbf

[ ] : Power boost

4. WEIGHT

Item	HX430 L	
	kg	lb
Upperstructure assembly	15610	34410
Main frame weld assembly	3045	6710
Engine assembly	710	1565
Main pump assembly	190	420
Main control valve assembly	340	750
Swing motor assembly	440	970
Hydraulic oil tank assembly	340	750
Fuel tank assembly	260	570
Counterweight	7500	16535
Cab assembly	490	1080
Lower chassis assembly	19600	43210
Track frame weld assembly	6430	14180
Swing bearing	550	1210
Travel motor assembly	630	1390
Turning joint	65	140
Track recoil spring and idler	325	720
Idler	310	680
Sprocket	95	210
Carrier roller	40	90
Track roller	90	192
Track-chain assembly (600 ㎜ standard triple grouser shoe)	2700	5950
Front attachment assembly (6.5 m boom, 3.2 m arm, 1.90 m^3 SAE heaped bucket)	8910	19640
6.5 m boom assembly	3180	7010
3.2 m arm assembly	1480	3260
1.90 m^3 SAE heaped bucket	1980	4370
Boom cylinder assembly	370	820
Arm cylinder assembly	480	1060
Bucket cylinder assembly	310	680
Bucket control linkage assembly	370	820

5. LIFTING CAPACITIES

1) HX430 L

(1) 6.5 m (21' 4") boom, 2.6 m (8' 6") arm equipped with 2.10 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius								At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
												m (ft)
9.0 m (30 ft)	kg									*6110	*6110	6.70
	lb									*13470	*13470	(22.0)
7.5 m (25.0 ft)	kg									*6020	*6020	8.02
	lb									*13270	*13270	(26.3)
6.0 m (20.0 ft)	kg					*7120	*7120	*6600	*6600	*6110	5360	8.86
	lb					*15700	*15700	*14550	*14550	*13470	11820	(29.1)
4.5 m (15.0 ft)	kg			*11000	*11000	*8440	*8440	*7210	*7210	*6270	4660	9.37
	lb			*24250	*24250	*18610	*18610	*15900	*15900	*13820	10270	(30.7)
3.0 m (10.0 ft)	kg			*14280	*14280	*10020	*10020	*8020	7050	*6500	4310	9.59
	lb			*31480	*31480	*22090	*22090	*17680	15540	*14330	9500	(31.5)
1.5 m (5.0 ft)	kg			*16530	15120	*11380	9660	*8800	6730	*6770	4240	9.56
	lb			*36440	33330	*25090	21300	*19400	14840	*14930	9350	(31.4)
Ground Line	kg			*17270	14740	*12190	9310	*9320	6510	*7070	4450	9.27
	lb			*38070	32500	*26870	20530	*20550	14350	*15590	9810	(30.4)
-1.5 m (-5.0 ft)	kg	*18230	*18230	*16960	14720	*12320	9190	*9370	6430	*7360	5020	8.68
	lb	*40190	*40190	*37390	32450	*27160	20260	*20660	14180	*16230	11070	(28.5)
-3.0 m (-10.0 ft)	kg	*21990	*21990	*15720	14940	*11590	9290			*7530	6250	7.73
	lb	*48480	*48480	*34660	32940	*25550	20480			*16600	13780	(25.4)
-4.5 m (-15.0 ft)	kg	*17990	*17990	*13070	*13070					*7190	*7190	6.24
	lb	*39660	*39660	*28810	*28810					*15850	*15850	(20.5)

Note 1. Lifting capacity are based on SAE J1097 and 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 located on the back of the bucket.
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.

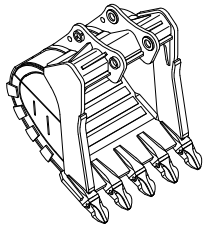
⚠ Failure to comply to the rated load can cause possible personal injury or property damage.
Make adjustments to the rated load as necessory for non-standard configurations.

(2) 6.5 m (21' 4") boom, 3.2 m (10' 6") arm equipped with 1.90 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius												At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
																m (ft)
9.0 m	kg													*5440	*5440	7.31
(30 ft)	lb													*11990	*11990	(24.0)
7.5 m	kg									*5330	*5330			*5490	*5490	8.53
(25.0 ft)	lb									*11750	*11750			*12100	*12100	(28.0)
6.0 m	kg									*6000	*6000			*5630	5080	9.32
(20.0 ft)	lb									*13230	*13230			*12410	11200	(30.6)
4.5 m	kg							*7670	*7670	*6690	*6690	*5290	*5290	*5850	4450	9.80
(15.0 ft)	lb							*16910	*16910	*14750	*14750	*11660	*11660	*12900	9810	(32.2)
3.0 m	kg					*12950	*12950	*9350	*9350	*7600	7290	*6650	5220	*6110	4130	10.01
(10.0 ft)	lb					*28550	*28550	*20610	*20610	*16760	16070	*14660	11510	*13470	9110	(32.8)
1.5 m	kg					*15710	15610	*10910	9940	*8500	6920	*7140	5020	*6420	4040	9.98
(5.0 ft)	lb					*34630	34410	*24050	21910	*18740	15260	*15740	11070	*14150	8910	(32.7)
Ground	kg			*12890	*12890	*17110	14960	*11990	9480	*9200	6640	*7490	4880	*6770	4190	9.70
Line	lb			*28420	*28420	*37720	32980	*26430	20900	*20280	14640	*16510	10760	*14930	9240	(31.8)
-1.5 m	kg	*13760	*13760	*17830	*17830	*17340	14770	*12430	9270	*9490	6490			*7150	4640	9.15
(-5.0 ft)	lb	*30340	*30340	*39310	*39310	*38230	32560	*27400	20440	*20920	14310			*15760	10230	(30.0)
-3.0 m	kg	*18570	*18570	*23870	*23870	*16570	14860	*12110	9270	*9150	6510			*7520	5610	8.26
(-10.0 ft)	lb	*40940	*40940	*52620	*52620	*36530	32760	*26700	20440	*20170	14350			*16580	12370	(27.1)
-4.5 m	kg	*24270	*24270	*20790	*20790	*14620	*14620	*10670	9500					*7700	*7700	6.89
(-15.0 ft)	lb	*53510	*53510	*45830	*45830	*32230	*32230	*23520	20940					*16980	*16980	(22.6)

6. BUCKET SELECTION GUIDE

1) HEAVY DUTY BUCKET



◆1.90 m³, 2.10 m³ SAE heaped bucket

Capacity		Width	Weight	Recommendation	
				6.5 m (21' 4") boom	
SAE heaped	CECE heaped			2.6 m arm (8' 6")	3.2 m arm (10' 6")
◆1.90 m³ (2.49 yd³)	1.65 m³ (2.16 yd³)	1665 mm (66")	1980 kg (4370 lb)	○	⊙
◆2.10 m³ (2.75 yd³)	1.84 m³ (2.41 yd³)	1800 mm (71")	2080 kg (4590 lb)	⊙	●

◆ : Rock-heavy duty bucket

○ Applicable for materials with density of 2000 kg/m³ (3370 lb/yd³) or less

⊙ Applicable for materials with density of 1600 kg/m³ (2700 lb/yd³) or less

● Applicable for materials with density of 1100 kg/m³ (1850 lb/yd³) or less

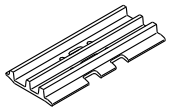
※ These recommendations are for general conditions and average use.
Work tools and ground conditions have effects on machine performance.
Select an optimum combination according to the working conditions and the type of work that is being done.
Consult your HD Hyundai Construction Equipment dealer for information on selecting the correct boom−arm−bucket combination.

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				
							
HX430 L	Shoe width	mm (in)	600 (24)	700 (28)	750 (30)	800 (32)	900 (36)
	Operating weight	kg (lb)	44120 (97270)	44640 (98410)	44900 (98990)	45170 (99580)	45680 (100710)
	Ground pressure	kgf/cm^2 (psi)	0.76 (10.81)	0.66 (9.39)	0.62 (8.82)	0.59 (8.39)	0.53 (7.54)
	Overall width	mm (ft-in)	3340 (10' 11")	3440 (11' 3")	3490 (11' 5")	3540 (11' 7")	3640 (11' 11")

3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	2 EA
Track rollers	9 EA
Track shoes	53 EA

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
750 mm triple grouser	Option	B
800 mm triple grouser	Option	C
900 mm triple grouser	Option	C

※ **Table 2**

Category	Applications	Applications
A	Rocky ground, river beds, normal soil	· Travel at low speed on rough ground with large obstacles such as boulders or fallen trees
B	Normal soil, soft ground	· These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees · Travel at high speed only on flat ground · Travel slowly at low speed if it is impossible to avoid going over obstacles
C	Extremely soft gound (swampy ground)	· Use the shoes only in the conditions that the machine sinks and it is impossible to use the shoes of category A or B · These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees · Travel at high speed only on flat ground · Travel slowly at low speed if it is impossible to avoid going over obstacles

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSL9
Type	4-cycle turbocharged charger air cooled diesel engine
Cooling method	Water cooling
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	114 × 145 mm (4.49" × 5.69")
Piston displacement	8900 cc (543 cu in)
Compression ratio	17.8 : 1
Rated net horse power (SAE J1349)	358Hp at 1800 rpm (267 kW at 1800 rpm)
Rated gross horse power (SAE J1995)	372 Hp at 1800 rpm (277 kW at 1800 rpm)
Maximum torque	166 kgf · m (1200 lbf · ft) at 1500 rpm
Engine oil quantity	30 ℓ (7.9 U.S. gal)
Wet weight	708 kg (1560 lb)
Low idling speed	900 ± 100 rpm
High idling speed	1700 + 50 rpm
Rated fuel consumption	155 g/Hp · hr at 1650 rpm
Starting motor	Denso (24V-7.8 kW)
Alternator	Denso 24V-95A
Battery	2 × 12V × 160Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 185 cc/rev
Maximum pressure	330 kgf/cm² (4690 psi) [360 kgf/cm² (5120 psi)]
Rated oil flow	2 × 333 ℓ/min (88.0 U.S. gpm / 73.2 U.K. gpm)
Rated speed	1800 rpm

[ ]: Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40 kgf/cm^2 (570 psi)
Rated oil flow	27.00 ℓ /min (7.1 U.S. gpm/5.9 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spools
Operating method	Hydraulic pilot system
Main relief valve pressure	330 kgf/cm^2 (4690 psi) [360 kgf/cm^2 (5120 psi)]
Overload relief valve pressure	390 kgf/cm^2 (5550 psi)

[ ]: Power boost

5) SWING MOTOR

Item	Specification
Type	Axial piston motor
Capacity	250 cc/rev
Relief pressure	290 kgf/cm^2 (4120 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	107 kgf · m (773 lbf · ft)
Brake release pressure	30~50 kgf/cm^2 (427~711 psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	360 kgf/cm^2 (5120 psi)
Capacity (max / min)	283/161 cc/rev
Reduction gear type	2-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	15.7 kgf/cm^2 (224 psi)
Braking torque	120 kgf · m (860 lbf · ft)

7) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	Ø160 × Ø110 × 1500 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	Ø170 × Ø120 × 1760 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø150 × Ø105 × 1295 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.**

8) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
HX430 L	Standard	600 mm (24")	0.76 kgf/cm^2 (10.81 psi)	53	3340 mm (10' 11")
	Option	700 mm (28")	0.66 kgf/cm^2 (9.39 psi)	53	3440 mm (11' 3")
		750 mm (30")	0.62 kgf/cm^2 (8.82 psi)	53	3490 mm (11' 5")
		800 mm (32")	0.59 kgf/cm^2 (8.39 psi)	53	3540 mm (11' 7")
		900 mm (36")	0.53 kgf/cm^2 (7.54 psi)	53	3640 mm (11' 11")

9) BUCKET

Item	Capacity		Tooth quantity	Width
	SAE heaped	CECE heaped		
HX430 L	◆1.90 m^3 (2.49 yd^3)	1.65 m^3 (2.16 yd^3)	5	1665 mm (66")
	◆2.10 m^3 (2.75 yd^3)	1.84 m^3 (2.41 yd^3)	5	1800 mm (71")

◆ : Rock-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	30 (7.9)	★SAE 5W-40 SAE 30 SAE 10W SAE 10W-30 SAE 15W-40
DEF/ AdBlue® tank	Mixture of urea and deionized water	42.5 (11.2)	ISO 22241, High-purity urea + deionized water (32.5:67.5)
Swing drive	Gear oil	8.0 (2.1)	★SAE 75W-90
Final drive	Gear oil	12.0×2 (3.2×2)	SAE 80W-90
Hydraulic tank	Hydraulic oil	Tank : 210 (55.5) System : 414 (109)	★ISO VG 15 ISO VG 32 ISO VG 46, HBHO VG 46★3 ISO VG 68
Fuel tank	Diesel fuel★1	550 (145.3)	★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★2	55 (14.5)	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
DEF : Diesel Exhaust Fluid, DEF compatible with AdBlue®

★ : Cold region (Russia, CIS, Mongolia)
★1 : Ultra low sulfur diesel
- sulfur content ≤ 15 ppm
★2 : Soft water
City water or distilled water
★3 : HD Hyundai Construction Equipment Bio Hydraulic Oil

※ 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.
※ Do not use any engine oil other than that specified above, as it may clog the diesel particulate filter(DPF).
※ 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.