



HX480A L, HX520A L

CRAWLER EXCAVATOR



SERVICE MANUAL

FOREWORD	4
1. Structure	4
2. How To Read The Service Manual	5
3. Conversion Table	6
SECTION 1 GENERAL	12
Group 1 Safety Hints	13
Group 2 Specifications	22
SECTION 2 STRUCTURE AND FUNCTION	66
Group 1 Pump Device	67
Group 2 Main Control Valve	83
Group 3 Swing Device	112
Group 4 Travel Device	123
Group 5 Rcv Lever	138
Group 6 Rcv Pedal	145
SECTION 3 HYDRAULIC SYSTEM	151
Group 1 Hydraulic Circuit	152
Group 2 Main Circuit	154
Group 3 Pilot Circuit	157
Group 4 Single Operation	165
Group 5 Combined Operation	175
SECTION 4 ELECTRICAL SYSTEM	183
Group 1 Component Location	184
Memorandum	189
Group 3 Electrical Component Specification	206
Group 4 Connectors	220
SECTION 5 MECHATRONICS SYSTEM	246
Group 1 Outline	247
Group 2 Mode Selection System	249
Group 3 Automatic Deceleration System	252
Group 4 Power Boost System	253
Group 5 Travel Speed Control System	254
Group 6 Automatic Warming Up System	255
Group 7 Engine Overheat Prevention System	256
Group 8 Variable Power Control System	257
Group 9 Attachment Flow Control System	258
Group 10 Boom Floating Control System	259
Group 11 Intelligent Power Control System	260

Group 12 Anti-restart System	262
Group 13 Self-diagnostic System	263
Group 14 Engine Control System	318
Group 15 Eppr Valve.	319
Group 16 Monitoring System.	322
Group 17 Fuel Warmer System	365
SECTION 6 TROUBLESHOOTING.	366
Group 1 Before Troubleshooting.	367
Group 2 Hydraulic And Mechanical System	370
Group 3 Electrical System	391
4. Mechatronics Syste4. System.	409
Group 5 Air Conditioner & Heater System	437
SECTION 7 MAINTENANCE STANDARD	440
Group 1 Operational Performance Test	441
Group 2 Major Component.	461
Group 3 Track And Work Equipment.	469
SECTION 8 DISASSEMBLY AND ASSEMBLY	475
Group 1 Precautions	476
Group 2 Tightening Torque.	479
Group 3 Pump Device	483
Group 4 Main Control Valve	526
Group 5 Swing Device	539
Group 6 Travel Device	572
Group 7 Rcv Lever	602
Group 8 Turning Joint	616
Group 9 Boom, Arm And Bucket Cylinder	621
Group 10 Undercarriage	642
Group 11 Work Equipment.	654

FOREWORD

1. STRUCTURE

This service manual has been prepared as an aid to improve the quality of repairs by giving the serviceman an accurate understanding of the product and by showing him the correct way to perform repairs and make judgements. Make sure you understand the contents of this manual and use it to full effect at every opportunity.

This service manual mainly contains the necessary technical information for operations performed in a service workshop.

For ease of understanding, the manual is divided into the following sections.

SECTION 1 GENERAL

This section explains the safety hints and gives the specification of the machine and major components.

SECTION 2 STRUCTURE AND FUNCTION

This section explains the structure and function of each component. It serves not only to give an understanding of the structure, but also serves as reference material for troubleshooting.

SECTION 3 HYDRAULIC SYSTEM

This section explains the hydraulic circuit, single and combined operation.

SECTION 4 ELECTRICAL SYSTEM

This section explains the electrical circuit, monitoring system and each component. It serves not only to give an understanding electrical system, but also serves as reference material for trouble shooting.

SECTION 5 MECHATRONICS SYSTEM

This section explains the computer aided power optimization system and each component.

SECTION 6 TROUBLESHOOTING

This section explains the troubleshooting charts correlating **problems** to **causes**.

SECTION 7 MAINTENANCE STANDARD

This section gives the judgement standards when inspecting disassembled parts.

SECTION 8 DISASSEMBLY AND ASSEMBLY

This section explains the order to be followed when removing, installing, disassembling or assembling each component, as well as precautions to be taken for these operations.

The specifications contained in this shop manual are subject to change at any time and without any advance notice. Contact your HYUNDAI distributor for the latest information.

2. HOW TO READ THE SERVICE MANUAL

Distribution and updating

Any additions, amendments or other changes will be sent to HYUNDAI distributors.

Get the most up-to-date information before you start any work.

Filing method

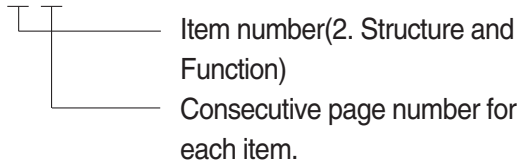
1. See the page number on the bottom of the page.

File the pages in correct order.

2. Following examples shows how to read the page number.

Example 1

2 - 3



3. Additional pages : Additional pages are indicated by a hyphen(-) and number after the page number. File as in the example.

8 - 4

8 - 4 - 1

8 - 4 - 2

8 - 5

Added pages

Revised edition mark(①②③...)

When a manual is revised, an edition mark is recorded on the bottom outside corner of the pages.

Revisions

Revised pages are shown at the list of revised pages on the between the contents page and section 1 page.

Symbols

So that the shop manual can be of ample practical use, important places for safety and quality are marked with the following symbols.

Symbol	Item	Remarks
	Safety	Special safety precautions are necessary when performing the work.
		Extra special safety precautions are necessary when performing the work because it is under internal pressure.
	Caution	Special technical precautions or other precautions for preserving standards are necessary when performing the work.

3. CONVERSION TABLE

Method of using the Conversion Table

The Conversion Table in this section is provided to enable simple conversion of figures. For details of the method of using the Conversion Table, see the example given below.

Example

1. Method of using the Conversion Table to convert from millimeters to inches

Convert 55 mm into inches.

- (1) Locate the number 50 in the vertical column at the left side, take this as (a), then draw a horizontal line from (a).
- (2) Locate the number 5 in the row across the top, take this as (b), then draw a perpendicular line down from (b).
- (3) Take the point where the two lines cross as (c). This point (c) gives the value when converting from millimeters to inches. Therefore, 55 mm = 2.165 inches.

2. Convert 550 mm into inches.

- (1) The number 550 does not appear in the table, so divide by 10 (Move the decimal point one place to the left) to convert it to 55 mm.
- (2) Carry out the same procedure as above to convert 55 mm to 2.165 inches.
- (3) The original value (550 mm) was divided by 10, so multiply 2.165 inches by 10 (Move the decimal point one place to the right) to return to the original value.
This gives 550 mm = 21.65 inches.

Millimeters to inches

(b)

1 mm = 0.03937 in

	0	1	2	3	4	5	6	7	8	9
0		0.039	0.079	0.118	0.157	0.197	0.236	0.276	0.315	0.354
10	0.394	0.433	0.472	0.512	0.551	0.591	0.630	0.669	0.709	0.748
20	0.787	0.827	0.866	0.906	0.945	0.984	1.024	1.063	1.102	1.142
30	1.181	1.220	1.260	1.299	1.339	1.378	1.417	1.457	1.496	1.536
40	1.575	1.614	1.654	1.693	1.732	1.772	1.811	1.850	1.890	1.929
(a) 50	1.969	2.008	2.047	2.087	2.126	(c) 2.165	2.205	2.244	2.283	2.323
60	2.362	2.402	2.441	2.480	2.520	2.559	2.598	2.638	2.677	2.717
70	2.756	2.795	2.835	2.874	2.913	2.953	2.992	3.032	3.071	3.110
80	3.150	3.189	3.228	3.268	3.307	3.346	3.386	3.425	3.465	3.504
90	3.543	3.583	3.622	3.661	3.701	3.740	3.780	3.819	3.858	3.898

Millimeters to inches

1 mm = 0.03937 in

	0	1	2	3	4	5	6	7	8	9
0		0.039	0.079	0.118	0.157	0.197	0.236	0.276	0.315	0.354
10	0.394	0.433	0.472	0.512	0.551	0.591	0.630	0.669	0.709	0.748
20	0.787	0.827	0.866	0.906	0.945	0.984	1.024	1.063	1.102	1.142
30	1.181	1.220	1.260	1.299	1.339	1.378	1.417	1.457	1.496	1.536
40	1.575	1.614	1.654	1.693	1.732	1.772	1.811	1.850	1.890	1.929
50	1.969	2.008	2.047	2.087	2.126	2.165	2.205	2.244	2.283	2.323
60	2.362	2.402	2.441	2.480	2.520	2.559	2.598	2.638	2.677	2.717
70	2.756	2.795	2.835	2.874	2.913	2.953	2.992	3.032	3.071	3.110
80	3.150	3.189	3.228	3.268	3.307	3.346	3.386	3.425	3.465	3.504
90	3.543	3.583	3.622	3.661	3.701	3.740	3.780	3.819	3.858	3.898

Kilogram to Pound

1 kg = 2.2046 lb

	0	1	2	3	4	5	6	7	8	9
0		2.20	4.41	6.61	8.82	11.02	13.23	15.43	17.64	19.84
10	22.05	24.25	26.46	28.66	30.86	33.07	35.27	37.48	39.68	41.89
20	44.09	46.30	48.50	50.71	51.91	55.12	57.32	59.5	61.73	63.93
30	66.14	68.34	70.55	72.75	74.96	77.16	79.37	81.57	83.78	85.98
40	88.18	90.39	92.59	94.80	97.00	99.21	101.41	103.62	105.82	108.03
50	110.23	112.44	114.64	116.85	119.05	121.25	123.46	125.66	127.87	130.07
60	132.28	134.48	136.69	138.89	141.10	143.30	145.51	147.71	149.91	152.12
70	154.32	156.53	158.73	160.94	163.14	165.35	167.55	169.76	171.96	174.17
80	176.37	178.57	180.78	182.98	185.19	187.39	189.60	191.80	194.01	196.21
90	198.42	200.62	202.83	205.03	207.24	209.44	211.64	213.85	216.05	218.26

Liter to U.S. Gallon

1 ℓ = 0.2642 U.S.Gal

	0	1	2	3	4	5	6	7	8	9
0		0.264	0.528	0.793	1.057	1.321	1.585	1.849	2.113	2.378
10	2.642	2.906	3.170	3.434	3.698	3.963	4.227	4.491	4.755	5.019
20	5.283	5.548	5.812	6.076	6.340	6.604	6.869	7.133	7.397	7.661
30	7.925	8.189	8.454	8.718	8.982	9.246	9.510	9.774	10.039	10.303
40	10.567	10.831	11.095	11.359	11.624	11.888	12.152	12.416	12.680	12.944
50	13.209	13.473	13.737	14.001	14.265	14.529	14.795	15.058	15.322	15.586
60	15.850	16.115	16.379	16.643	16.907	17.171	17.435	17.700	17.964	18.228
70	18.492	18.756	19.020	19.285	19.549	19.813	20.077	20.341	20.605	20.870
80	21.134	21.398	21.662	21.926	22.190	22.455	22.719	22.983	23.247	23.511
90	23.775	24.040	24.304	24.568	24.832	25.096	25.631	25.625	25.889	26.153

Liter to U.K. Gallon

1 ℓ = 0.21997 U.K.Gal

	0	1	2	3	4	5	6	7	8	9
0		0.220	0.440	0.660	0.880	1.100	1.320	1.540	1.760	1.980
10	2.200	2.420	2.640	2.860	3.080	3.300	3.520	3.740	3.950	4.179
20	4.399	4.619	4.839	5.059	5.279	5.499	5.719	5.939	6.159	6.379
30	6.599	6.819	7.039	7.259	7.479	7.699	7.919	8.139	8.359	8.579
40	8.799	9.019	9.239	9.459	9.679	9.899	10.119	10.339	10.559	10.778
50	10.998	11.281	11.438	11.658	11.878	12.098	12.318	12.528	12.758	12.978
60	13.198	13.418	13.638	13.858	14.078	14.298	14.518	14.738	14.958	15.178
70	15.398	15.618	15.838	16.058	16.278	16.498	16.718	16.938	17.158	17.378
80	17.598	17.818	18.037	18.257	18.477	18.697	18.917	19.137	19.357	19.577
90	19.797	20.017	20.237	20.457	20.677	20.897	21.117	21.337	21.557	21.777

kgf · m to lbf · ft

1 kgf · m = 7.233 lbf · ft

	0	1	2	3	4	5	6	7	8	9
		7.2	14.5	21.7	28.9	36.2	43.4	50.6	57.9	65.1
10	72.3	79.6	86.8	94.0	101.3	108.5	115.7	123.0	130.2	137.4
20	144.7	151.9	159.1	166.4	173.6	180.8	188.1	195.3	202.5	209.8
30	217.0	224.2	231.5	238.7	245.9	253.2	260.4	267.6	274.9	282.1
40	289.3	296.6	303.8	311.0	318.3	325.5	332.7	340.0	347.2	354.4
50	361.7	368.9	376.1	383.4	390.6	397.8	405.1	412.3	419.5	426.8
60	434.0	441.2	448.5	455.7	462.9	470.2	477.4	484.6	491.8	499.1
70	506.3	513.5	520.8	528.0	535.2	542.5	549.7	556.9	564.2	571.4
80	578.6	585.9	593.1	600.3	607.6	614.8	622.0	629.3	636.5	643.7
90	651.0	658.2	665.4	672.7	679.9	687.1	694.4	701.6	708.8	716.1
100	723.3	730.5	737.8	745.0	752.2	759.5	766.7	773.9	781.2	788.4
110	795.6	802.9	810.1	817.3	824.6	831.8	839.0	846.3	853.5	860.7
120	868.0	875.2	882.4	889.7	896.9	904.1	911.4	918.6	925.8	933.1
130	940.3	947.5	954.8	962.0	969.2	976.5	983.7	990.9	998.2	10005.4
140	1012.6	1019.9	1027.1	1034.3	1041.5	1048.8	1056.0	1063.2	1070.5	1077.7
150	1084.9	1092.2	1099.4	1106.6	1113.9	1121.1	1128.3	1135.6	1142.8	1150.0
160	1157.3	1164.5	1171.7	1179.0	1186.2	1193.4	1200.7	1207.9	1215.1	1222.4
170	1129.6	1236.8	1244.1	1251.3	1258.5	1265.8	1273.0	1280.1	1287.5	1294.7
180	1301.9	1309.2	1316.4	1323.6	1330.9	1338.1	1345.3	1352.6	1359.8	1367.0
190	1374.3	1381.5	1388.7	1396.0	1403.2	1410.4	1417.7	1424.9	1432.1	1439.4

kgf/cm² to lbf/in²

1 kgf / cm² = 14.2233 lbf / in²

	0	1	2	3	4	5	6	7	8	9
		14.2	28.4	42.7	56.9	71.1	85.3	99.6	113.8	128.0
10	142.2	156.5	170.7	184.9	199.1	213.4	227.6	241.8	256.0	270.2
20	284.5	298.7	312.9	327.1	341.4	355.6	369.8	384.0	398.3	412.5
30	426.7	440.9	455.1	469.4	483.6	497.8	512.0	526.3	540.5	554.7
40	568.9	583.2	597.4	611.6	625.8	640.1	654.3	668.5	682.7	696.9
50	711.2	725.4	739.6	753.8	768.1	782.3	796.5	810.7	825.0	839.2
60	853.4	867.6	881.8	896.1	910.3	924.5	938.7	953.0	967.2	981.4
70	995.6	1010	1024	1038	1053	1067	1081	1095	1109	1124
80	1138	1152	1166	1181	1195	1209	1223	1237	1252	1266
90	1280	1294	1309	1323	1337	1351	1365	1380	1394	1408
100	1422	1437	1451	1465	1479	1493	1508	1522	1536	1550
110	1565	1579	1593	1607	1621	1636	1650	1664	1678	1693
120	1707	1721	1735	1749	1764	1778	1792	1806	1821	1835
130	1849	2863	1877	1892	1906	1920	1934	1949	1963	1977
140	1991	2005	2020	2034	2048	2062	2077	2091	2105	2119
150	2134	2148	2162	2176	2190	2205	2219	2233	2247	2262
160	2276	2290	2304	2318	2333	2347	2361	2375	2389	2404
170	2418	2432	2446	2460	2475	2489	2503	2518	2532	2546
180	2560	2574	2589	5603	2617	2631	2646	2660	2674	2688
200	2845	2859	2873	2887	2901	2916	2930	2944	2958	2973
210	2987	3001	3015	3030	3044	3058	3072	3086	3101	3115
220	3129	3143	3158	3172	3186	3200	3214	3229	3243	3257
230	3271	3286	3300	3314	3328	3343	3357	3371	3385	3399
240	3414	3428	3442	3456	3470	3485	3499	3513	3527	3542

TEMPERATURE

Fahrenheit-Centigrade Conversion.

A simple way to convert a fahrenheit temperature reading into a centigrade temperature reading or vice verse is to enter the accompanying table in the center or boldface column of figures.

These figures refer to the temperature in either Fahrenheit or Centigrade degrees.

If it is desired to convert from Fahrenheit to Centigrade degrees, consider the center column as a table of Fahrenheit temperatures and read the corresponding Centigrade temperature in the column at the left.

If it is desired to convert from Centigrade to Fahrenheit degrees, consider the center column as a table of Centigrade values, and read the corresponding Fahrenheit temperature on the right.

°C		°F	°C		°F	°C		°F	°C		°F
-40.4	-40	-40.0	-11.7	11	51.8	7.8	46	114.8	27.2	81	117.8
-37.2	-35	-31.0	-11.1	12	53.6	8.3	47	116.6	27.8	82	179.6
-34.4	-30	-22.0	-10.6	13	55.4	8.9	48	118.4	28.3	83	181.4
-31.7	-25	-13.0	-10.0	14	57.2	9.4	49	120.2	28.9	84	183.2
-28.9	-20	-4.0	-9.4	15	59.0	10.0	50	122.0	29.4	85	185.0
-28.3	-19	-2.2	-8.9	16	60.8	10.6	51	123.8	30.0	86	186.8
-27.8	-18	-0.4	-8.3	17	62.6	11.1	52	125.6	30.6	87	188.6
-27.2	-17	1.4	-7.8	18	64.4	11.7	53	127.4	31.1	88	190.4
-26.7	-16	3.2	-6.7	20	68.0	12.8	55	131.0	32.2	90	194.0
-26.1	-15	5.0	-6.7	20	68.0	12.8	55	131.0	32.2	90	194.0
-25.6	-14	6.8	-6.1	21	69.8	13.3	56	132.8	32.8	91	195.8
-25.0	-13	8.6	-5.6	22	71.6	13.9	57	134.6	33.3	92	197.6
-24.4	-12	10.4	-5.0	23	73.4	14.4	58	136.4	33.9	93	199.4
-23.9	-11	12.2	-4.4	24	75.2	15.0	59	138.2	34.4	94	201.2
-23.3	-10	14.0	-3.9	25	77.0	15.6	60	140.0	35.0	95	203.0
-22.8	-9	15.8	-3.3	26	78.8	16.1	61	141.8	35.6	96	204.8
-22.2	-8	17.6	-2.8	27	80.6	16.7	62	143.6	36.1	97	206.6
-21.7	-7	19.4	-2.2	28	82.4	17.2	63	145.4	36.7	98	208.4
-21.1	-6	21.2	-1.7	29	84.2	17.8	64	147.2	37.2	99	210.2
-20.6	-5	23.0	-1.1	35	95.0	21.1	70	158.0	51.7	125	257.0
-20.0	-4	24.8	-0.6	31	87.8	18.9	66	150.8	40.6	105	221.0
-19.4	-3	26.6	0	32	89.6	19.4	67	152.6	43.3	110	230.0
-18.9	-2	28.4	0.6	33	91.4	20.0	68	154.4	46.1	115	239.0
-18.3	-1	30.2	1.1	34	93.2	20.6	69	156.2	48.9	120	248.0
-17.8	0	32.0	1.7	35	95.0	21.1	70	158.0	51.7	125	257.0
-17.2	1	33.8	2.2	36	96.8	21.7	71	159.8	54.4	130	266.0
-16.7	2	35.6	2.8	37	98.6	22.2	72	161.6	57.2	135	275.0
-16.1	3	37.4	3.3	38	100.4	22.8	73	163.4	60.0	140	284.0
-15.6	4	39.2	3.9	39	102.2	23.3	74	165.2	62.7	145	293.0
-15.0	5	41.0	4.4	40	104.0	23.9	75	167.0	65.6	150	302.0
-14.4	6	42.8	5.0	41	105.8	24.4	76	168.8	68.3	155	311.0
-13.9	7	44.6	5.6	42	107.6	25.0	77	170.6	71.1	160	320.0
-13.3	8	46.4	6.1	43	109.4	25.6	78	172.4	73.9	165	329.0
-12.8	9	48.2	6.7	44	111.2	26.1	79	174.2	76.7	170	338.0
-12.2	10	50.0	7.2	45	113.0	26.7	80	176.0	79.4	172	347.0

SECTION 1 GENERAL

Group 1 Safety Hints	1-1
Group 2 Specifications	1-10

SECTION 1 GENERAL

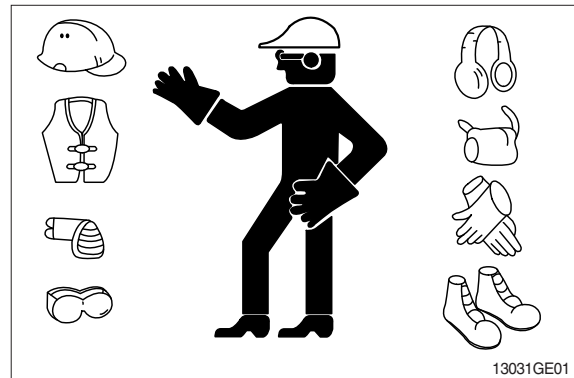
GROUP 1 SAFETY HINTS

FOLLOW SAFE PROCEDURE

Unsafe work practices are dangerous. Understand service procedure before doing work; Do not attempt shortcuts.

WEAR PROTECTIVE CLOTHING

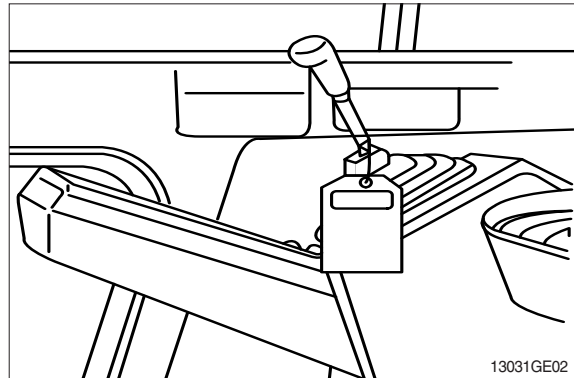
Wear close fitting clothing and safety equipment appropriate to the job.



WARN OTHERS OF SERVICE WORK

Unexpected machine movement can cause serious injury.

Before performing any work on the excavator, attach a 「Do Not Operate」 tag on the right side control lever.



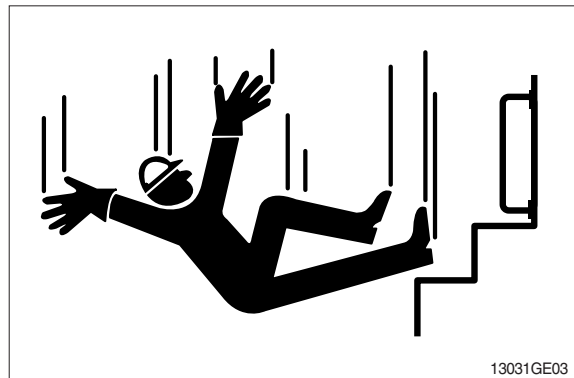
USE HANDHOLDS AND STEPS

Falling is one of the major causes of personal injury.

When you get on and off the machine, always maintain a three point contact with the steps and handrails and face the machine. Do not use any controls as handholds.

Never jump on or off the machine. Never mount or dismount a moving machine.

Be careful of slippery conditions on platforms, steps, and handrails when leaving the machine.

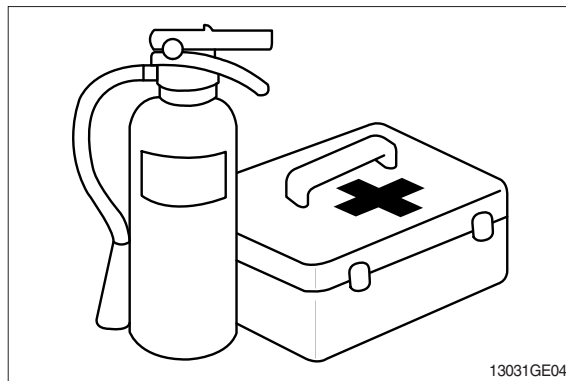


PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

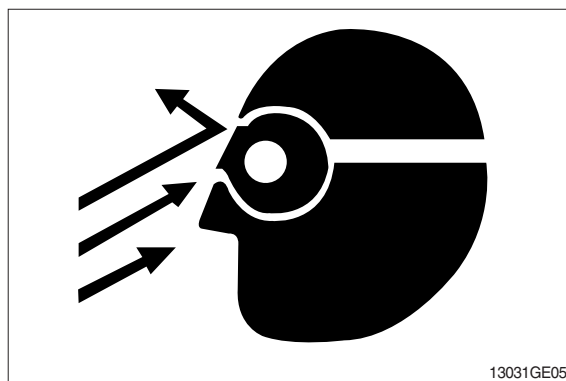
Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



PROTECT AGAINST FLYING DEBRIS

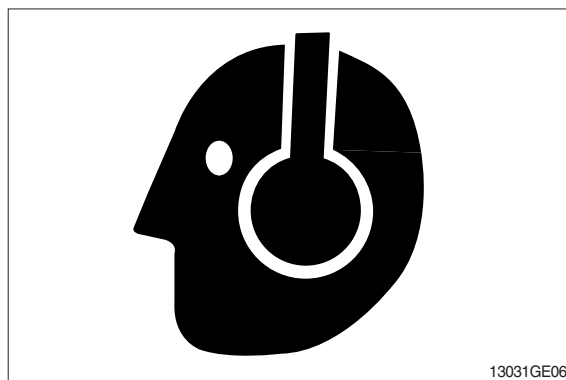
Guard against injury from flying pieces of metal or debris; Wear goggles or safety glasses.



PROTECT AGAINST NOISE

Prolonged exposure to loud noise can cause impairment or loss of hearing.

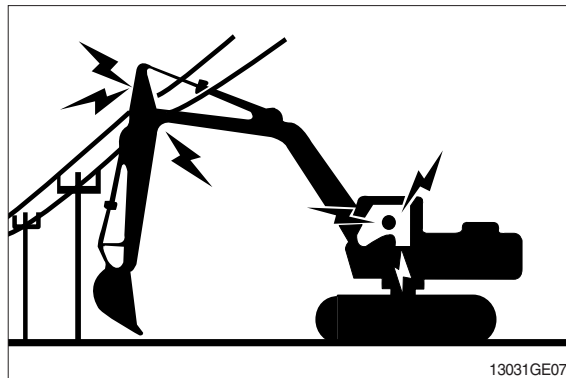
Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.



AVOID POWER LINES

Serious injury or death can result from contact with electric lines.

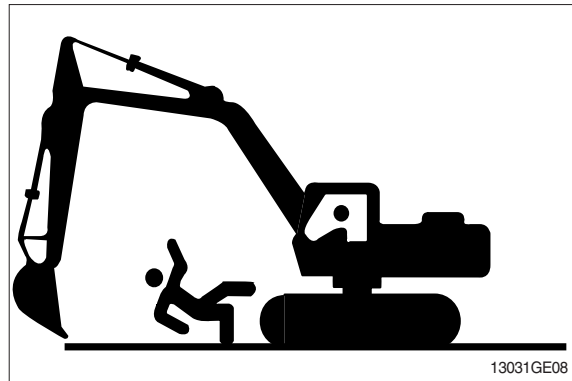
Never move any part of the machine or load closer to electric line than 3m(10ft) plus twice the line insulator length.



KEEP RIDERS OFF EXCAVATOR

Only allow the operator on the excavator. Keep riders off.

Riders on excavator are subject to injury such as being struck by foreign objects and being thrown off the excavator. Riders also obstruct the operator's view resulting in the excavator being operated in an unsafe manner.

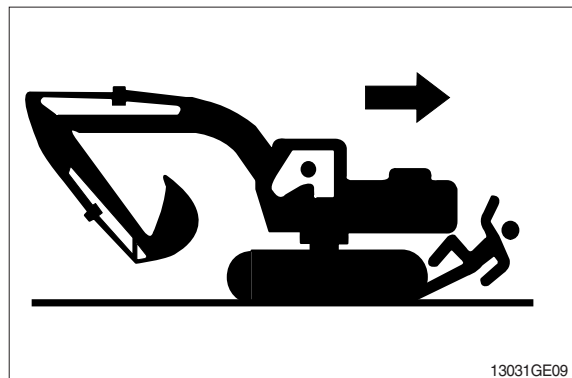


MOVE AND OPERATE MACHINE SAFELY

Bystanders can be run over. Know the location of bystanders before moving, swinging, or operating the machine.

Always keep the travel alarm in working condition. It warns people when the excavator starts to move.

Use a signal person when moving, swinging, or operating the machine in congested areas. Coordinate hand signals before starting the excavator.



OPERATE ONLY FROM OPERATOR'S SEAT

Avoid possible injury machine damage. Do not start engine by shorting across starter terminals.

NEVER start engine while standing on ground. Start engine only from operator's seat.



PARK MACHINE SAFELY

Before working on the machine:

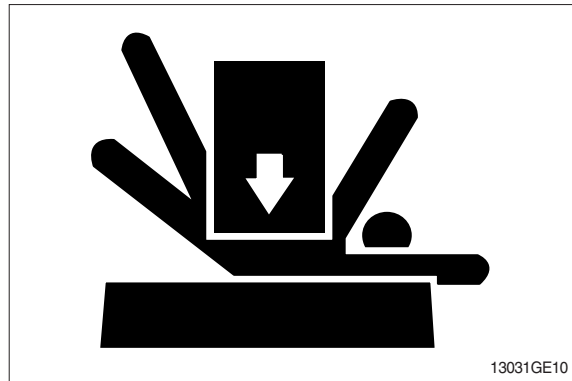
- Park machine on a level surface.
- Lower bucket to the ground.
- Turn auto idle switch off.
- Run engine at 1/2 speed without load for 2 minutes.
- Turn key switch to OFF to stop engine. Remove key from switch.
- Move pilot control shutoff lever to locked position.
- Allow engine to cool.

SUPPORT MACHINE PROPERLY

Always lower the attachment or implement to the ground before you work on the machine. If you must work on a lifted machine or attachment, securely support the machine or attachment.

Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load.

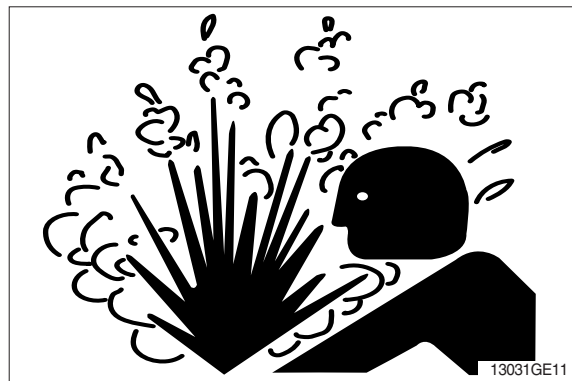
Do not work under a machine that is supported solely by a jack. Follow recommended procedures in this manual.



SERVICE COOLING SYSTEM SAFELY

Explosive release of fluids from pressurized cooling system can cause serious burns.

Shut off engine. Only remove filler cap when cool enough to touch with bare hands.



HANDLE FLUIDS SAFELY-AVOID FIRES

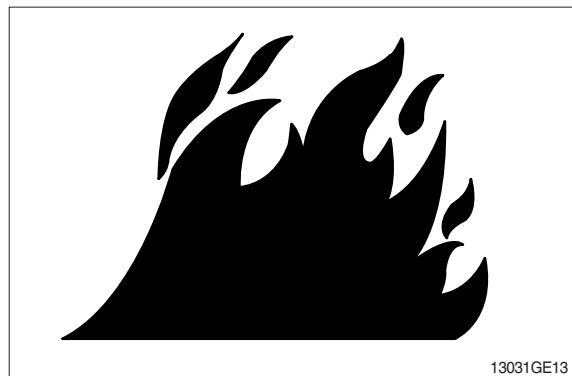
Handle fuel with care; It is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks. Always stop engine before refueling machine. Fill fuel tank outdoors.



Store flammable fluids away from fire hazards. Do not incinerate or puncture pressurized containers.

Make sure machine is clean of trash, grease, and debris.

Do not store oily rags; They can ignite and burn spontaneously.



BEWARE OF EXHAUST FUMES

Prevent asphyxiation. Engine exhaust fumes can cause sickness or death.

If you must operate in a building, be positive there is adequate ventilation. Either use an exhaust pipe extension to remove the exhaust fumes or open doors and windows to bring enough outside air into the area.

REMOVE PAINT BEFORE WELDING OR HEATING

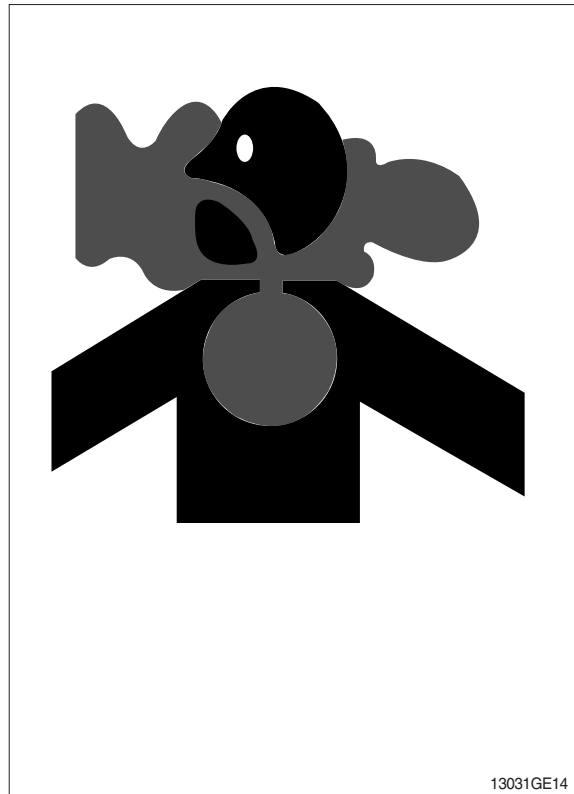
Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Do all work outside or in a well ventilated area. Dispose of paint and solvent properly.

Remove paint before welding or heating:

- If you sand or grind paint, avoid breathing the dust.
Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.



ILLUMINATE WORK AREA SAFELY

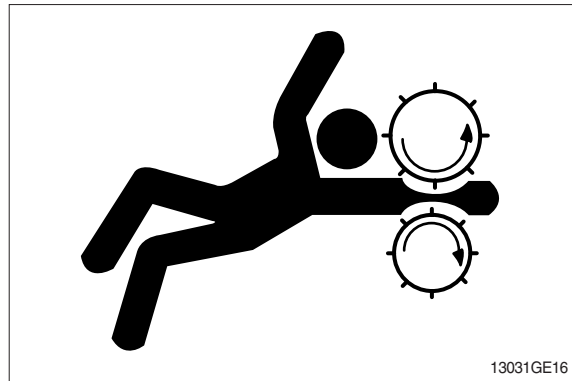
Illuminate your work area adequately but safely. Use a portable safety light for working inside or under the machine. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.



SERVICE MACHINE SAFELY

Tie long hair behind your head. Do not wear a necktie, scarf, loose clothing or necklace when you work near machine tools or moving parts. If these items were to get caught, severe injury could result.

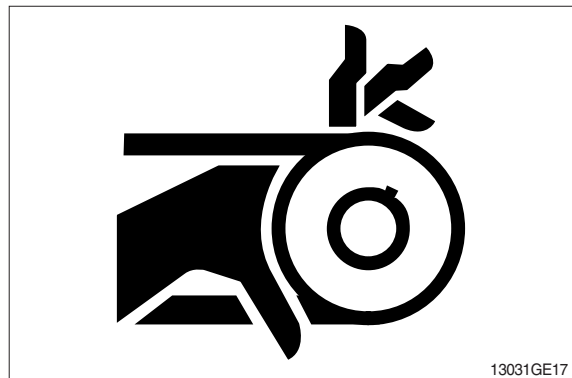
Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.



STAY CLEAR OF MOVING PARTS

Entanglements in moving parts can cause serious injury.

To prevent accidents, use care when working around rotating parts.



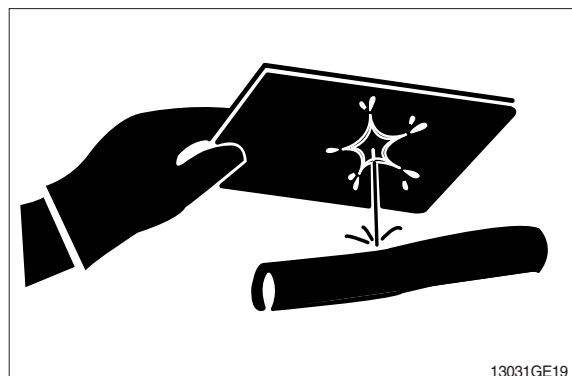
AVOID HIGH PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.



AVOID HEATING NEAR PRESSURIZED FLUID LINES

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials.

Pressurized lines can be accidentally cut when heat goes beyond the immediate flame area. Install fire resisting guards to protect hoses or other materials.



PREVENT BATTERY EXPLOSIONS

Keep sparks, lighted matches, and flame away from the top of battery. Battery gas can explode.

Never check battery charge by placing a metal object across the posts. Use a volt-meter or hydrometer.

Do not charge a frozen battery; It may explode. Warm battery to 16°C (60°F).



PREVENT ACID BURNS

Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid the hazard by:

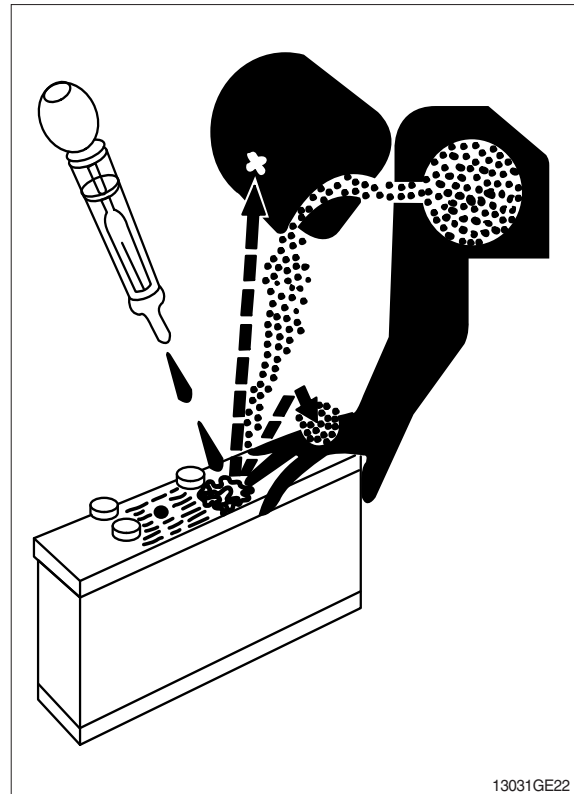
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

If you spill acid on yourself:

1. Flush your skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush your eyes with water for 10-15 minutes. Get medical attention immediately.

If acid is swallowed:

1. Drink large amounts of water or milk.
2. Then drink milk of magnesia, beaten eggs, or vegetable oil.
3. Get medical attention immediately.



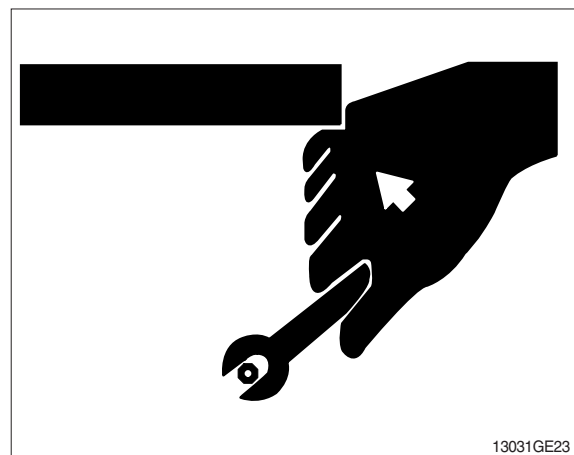
USE TOOLS PROPERLY

Use tools appropriate to the work. Makeshift tools, parts, and procedures can create safety hazards.

Use power tools only to loosen threaded tools and fasteners.

For loosening and tightening hardware, use the correct size tools. DO NOT use U.S. measurement tools on metric fasteners. Avoid bodily injury caused by slipping wrenches.

Use only recommended replacement parts. (See Parts catalogue.)

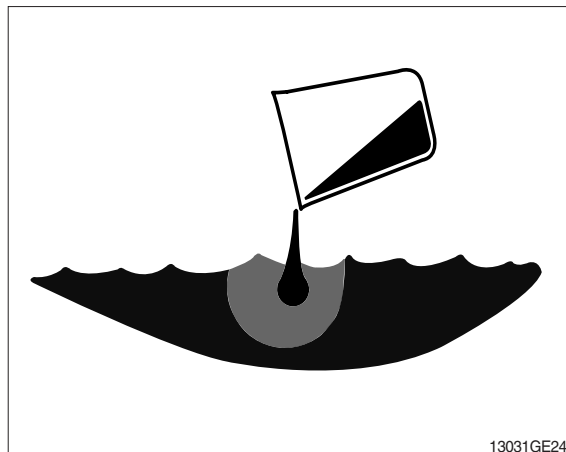


DISPOSE OF FLUIDS PROPERLY

Improperly disposing of fluids can harm the environment and ecology. Before draining any fluids, find out the proper way to dispose of waste from your local environmental agency.

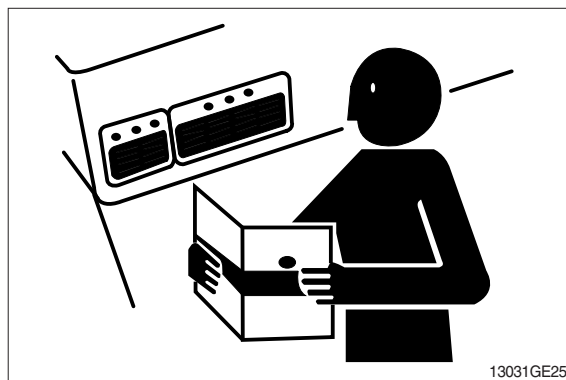
Use proper containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

DO NOT pour oil into the ground, down a drain, or into a stream, pond, or lake. Observe relevant environmental protection regulations when disposing of oil, fuel, coolant, brake fluid, filters, batteries, and other harmful waste.



REPLACE SAFETY SIGNS

Replace missing or damaged safety signs. See the machine operator's manual for correct safety sign placement.

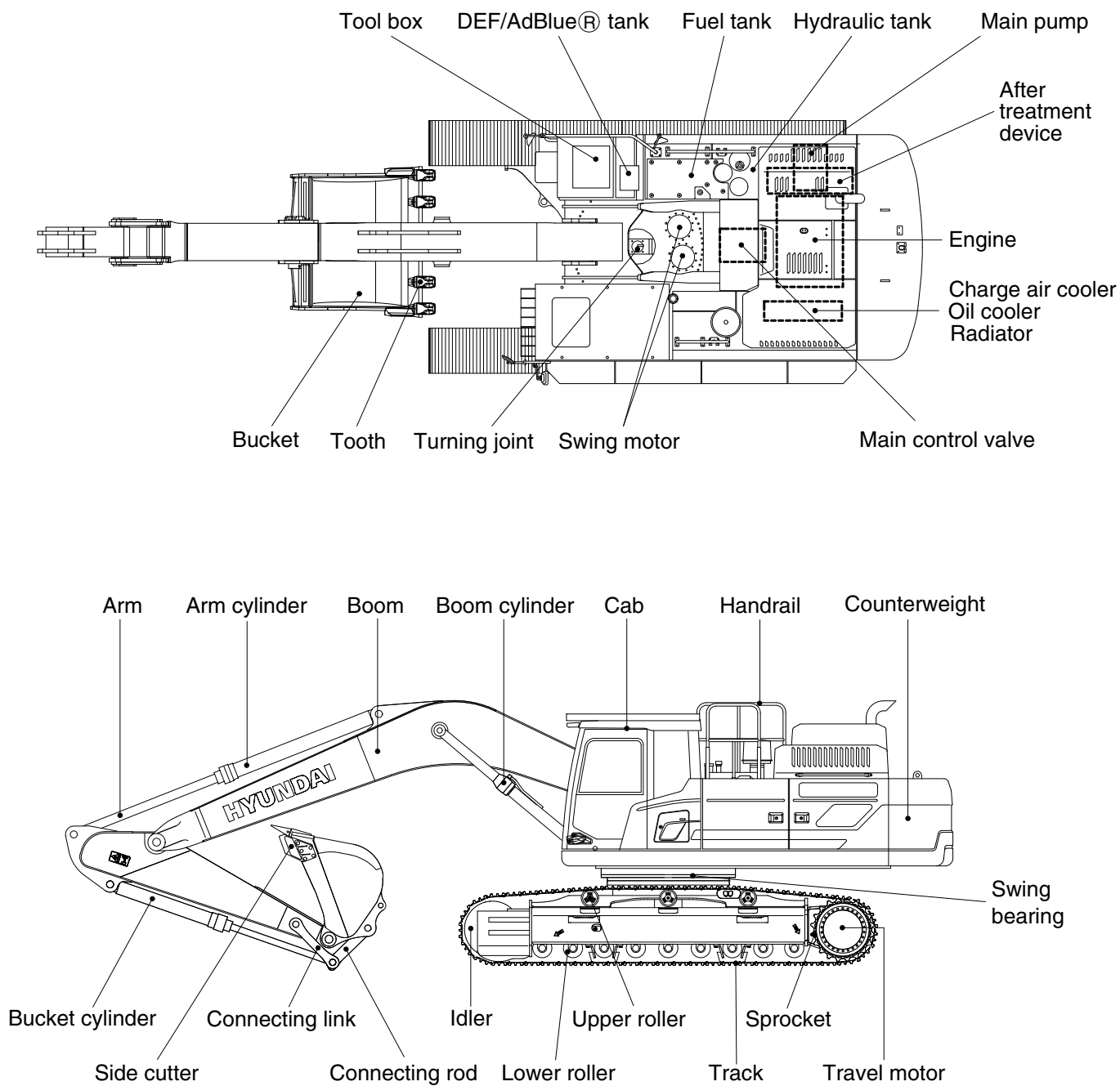


LIVE WITH SAFETY

Before returning machine to customer, make sure machine is functioning properly, especially the safety systems. Install all guards and shields.

GROUP 2 SPECIFICATIONS

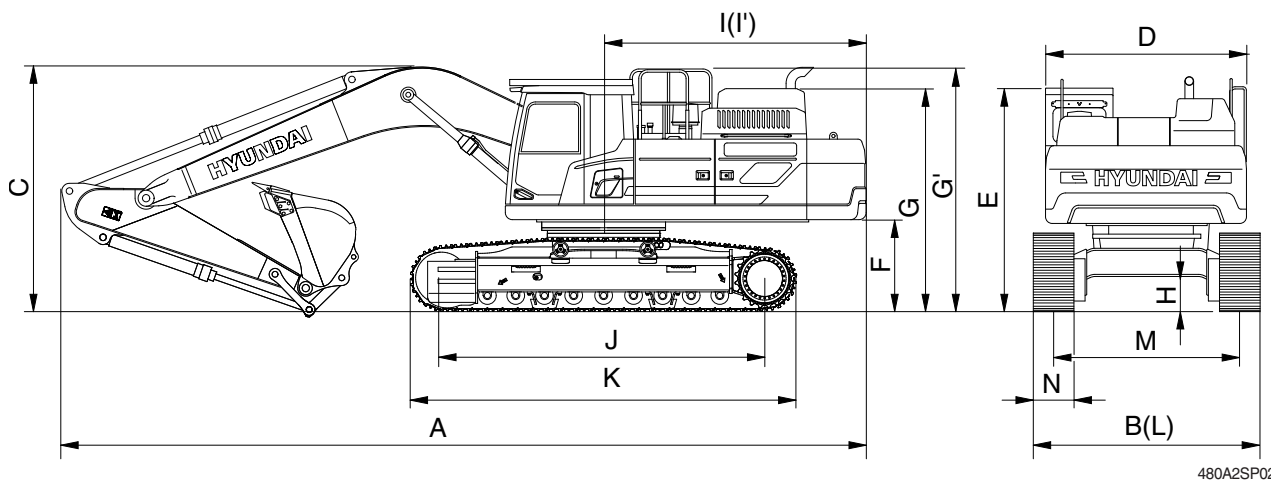
1. MAJOR COMPONENT



480A2SP01

2. SPECIFICATIONS

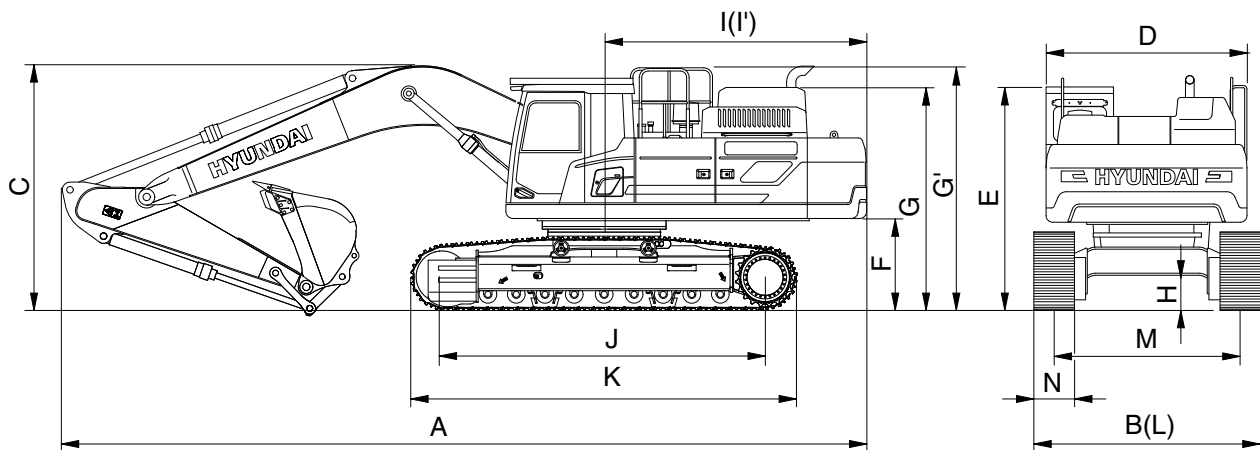
1) HX480A L (1/4)



480A2SP02

Description		Unit		Specification	
		m (ft-in)	Boom	7.06 (23' 2")	
			Arm	3.38 (11' 1")	
		mm (in)	Shoe	600 (24)	800 (32)
Operating weight		kg (lb)		50870 (112150)	51920 (114460)
Bucket capacity (SAE heaped), standard		m³ (yd³)		2.20 (2.88)	2.20 (2.88)
Overall length	A	mm (ft-in)		12160 (39' 11")	12160 (39' 11")
Overall width	B			3340 (10' 11")	3540 (11' 7")
Overall height of boom	C			3850 (12' 8")	3850 (12' 8")
Superstructure width	D			2980 (9' 9")	2980 (9' 9")
Overall height of cab	E			3220 (10' 7")	3220 (10' 7")
Ground clearance of counterweight	F			1300 (4' 3")	1300 (4' 3")
Overall height of engine hood	G			3016 (9' 11")	3016 (9' 11")
Overall height of handrail	G'			3450 (11' 4")	3450 (11' 4")
Minimum ground clearance	H			565 (1' 10")	565 (1' 10")
Rear-end distance	I			3745 (12' 3")	3745 (12' 3")
Rear-end swing radius	I'			3800 (12' 6")	3800 (12' 6")
Distance between tumblers	J			4470 (14' 8")	4470 (14' 8")
Undercarriage length (without grouser)	K			5416 (17' 9")	5416 (17' 9")
Undercarriage length (with grouser)				5490 (18' 0")	5490 (18' 0")
Undercarriage width	L			3340 (10' 11")	3340 (10' 11")
Track gauge	M			2740 (9' 0")	2740 (9' 0")
Track shoe width, standard	N			600 (24")	800 (32")
Travel speed (low/high)		km/hr (mph)		3.3/5.3 (2.1/3.3)	3.3/5.3 (2.1/3.3)
Swing speed		rpm		8.8	8.8
Gradeability		Degree (%)		35 (70)	35 (70)
Ground pressure		kgf/cm² (psi)		0.88 (12.6)	0.68 (9.6)
Max traction force		kg (lb)		39674 (87446)	39674 (87466)

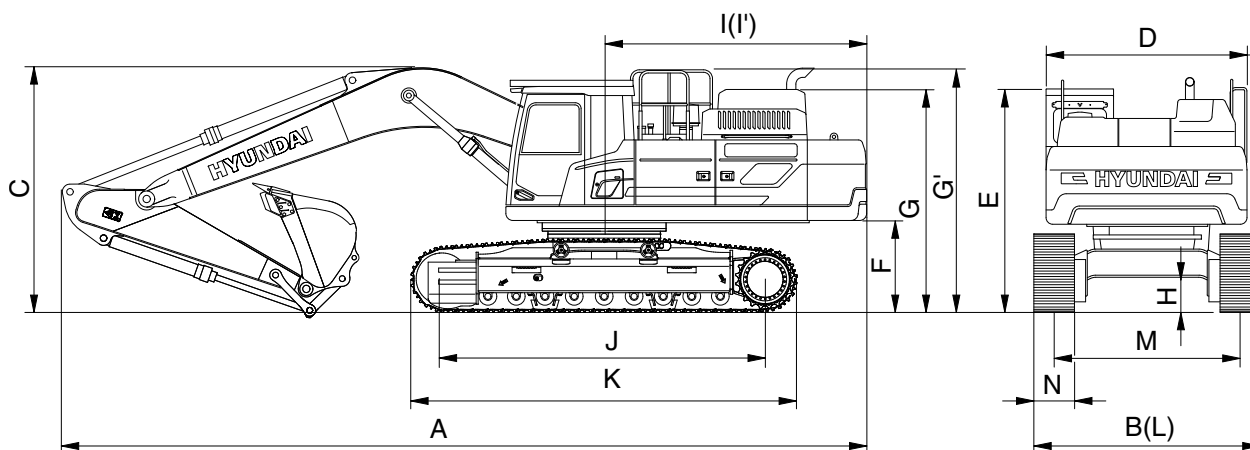
HX480A L (2/4)



480A2SP02

Description		Unit		Specification		
		m (ft-in)	Boom	7.06 (23' 2")		
			Arm	2.90 (9' 6")	4.00 (13' 1")	2.55 (8' 4")
		mm (in)	Shoe	600 (24)		
Operating weight		kg (lb)		50850 (112100)	50920 (112260)	50690 (111750)
Bucket capacity (SAE heaped), standard		m³ (yd³)		2.20 (2.88)	2.20 (2.88)	2.20 (2.88)
Overall length	A	mm (ft-in)	12220 (40' 1")	12150 (39' 10")	12210 (40' 1")	
Overall width	B		3340 (10' 11")	3340 (10' 11")	3340 (10' 11")	
Overall height of boom	C		3850 (12' 8")	3890 (12' 9")	3790 (12' 5")	
Superstructure width	D		2980 (9' 9")	2980 (9' 9")	2980 (9' 9")	
Overall height of cab	E		3220 (10' 7")	3220 (10' 7")	3220 (10' 7")	
Ground clearance of counterweight	F		1300 (4' 3")	1300 (4' 3")	1300 (4' 3")	
Overall height of engine hood	G		3016 (9' 11")	3016 (9' 11")	3016 (9' 11")	
Overall height of handrail	G'		3450 (11' 4")	3450 (11' 4")	3450 (11' 4")	
Minimum ground clearance	H		565 (1' 10")	565 (1' 10")	565 (1' 10")	
Rear-end distance	I		3745 (12' 3")	3745 (12' 3")	3745 (12' 3")	
Rear-end swing radius	I'		3800 (12' 6")	3800 (12' 6")	3800 (12' 6")	
Distance between tumblers	J		4470 (14' 8")	4470 (14' 8")	4470 (14' 8")	
Undercarriage length (without grouser)	K		5416 (17' 9")	5416 (17' 9")	5416 (17' 9")	
Undercarriage length (with grouser)			5490 (18' 0")	5490 (18' 0")	5490 (18' 0")	
Undercarriage width	L		3340 (10' 11")	3340 (10' 11")	3340 (10' 11")	
Track gauge	M		2740 (9' 0")	2740 (9' 0")	2740 (9' 0")	
Track shoe width, standard	N		600 (24")	600 (24")	600 (24")	
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)	3.3/5.3 (2.1/3.3)	3.3/5.3 (2.1/3.3)	
Swing speed		rpm	8.8	8.8	8.8	
Gradeability		Degree (%)	35 (70)	35 (70)	35 (70)	
Ground pressure		kgf/cm² (psi)	0.88 (12.6)	0.88 (12.6)	0.88 (12.5)	
Max traction force		kg (lb)	39674 (87446)	39674 (87446)	39674 (87446)	

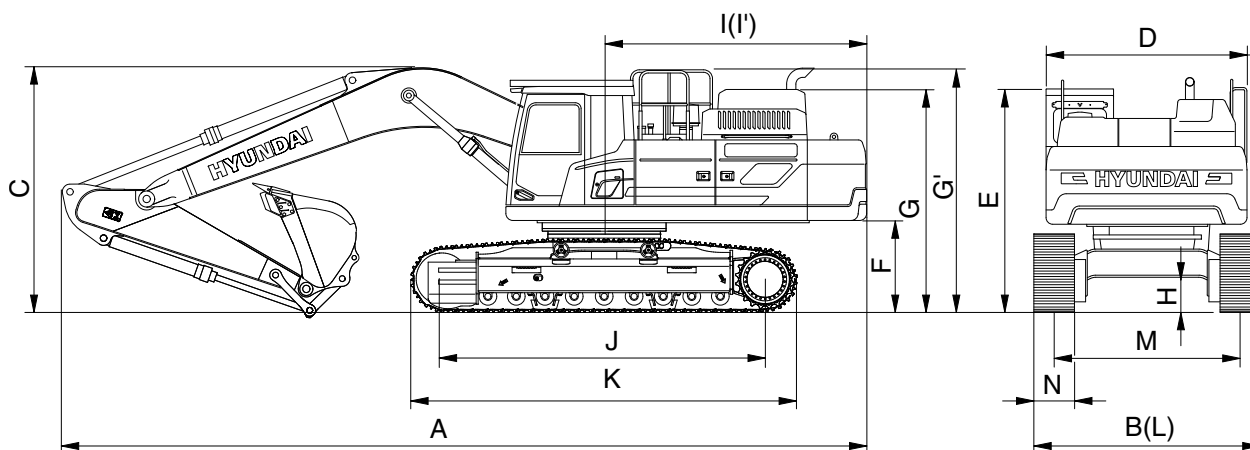
HX480A L (3/4)



480A2SP02

Description		Unit		Specification	
		m (ft-in)	Boom	6.55 (21' 6")	
			Arm	2.90 (9' 6")	2.55 (8' 4")
		mm (in)	Shoe	600 (24)	
Operating weight		kg (lb)		50680 (111730)	50510 (111360)
Bucket capacity (SAE heaped), standard		m³ (yd³)		2.20 (2.88)	2.20 (2.88)
Overall length	A	mm (ft-in)	11690 (38' 4")		11680 (38' 4")
Overall width	B		3340 (10' 11")		3340 (10' 11")
Overall height of boom	C		3950 (13' 0")		3790 (12' 5")
Superstructure width	D		2980 (9' 9")		2980 (9' 9")
Overall height of cab	E		3220 (10' 7")		3220 (10' 7")
Ground clearance of counterweight	F		1300 (4' 3")		1300 (4' 3")
Overall height of engine hood	G		3016 (9' 11")		3016 (9' 11")
Overall height of handrail	G'		3450 (11' 4")		3450 (11' 4")
Minimum ground clearance	H		565 (1' 10")		565 (1' 10")
Rear-end distance	I		3745 (12' 3")		3745 (12' 3")
Rear-end swing radius	I'		3800 (12' 6")		3800 (12' 6")
Distance between tumblers	J		4470 (14' 8")		4470 (14' 8")
Undercarriage length (without grouser)	K		5416 (17' 9")		5416 (17' 9")
Undercarriage length (with grouser)			5490 (18' 0")		5490 (18' 0")
Undercarriage width	L		3340 (10' 11")		3340 (10' 11")
Track gauge	M		2740 (9' 0")		2740 (9' 0")
Track shoe width, standard	N		600 (24")		600 (24")
Travel speed (low/high)		km/hr (mph)		3.3/5.3 (2.1/3.3)	3.3/5.3 (2.1/3.3)
Swing speed		rpm		8.8	8.8
Gradeability		Degree (%)		35 (70)	35 (70)
Ground pressure		kgf/cm² (psi)		0.88 (12.5)	0.88 (12.5)
Max traction force		kg (lb)		39674 (87466)	39674 (87466)

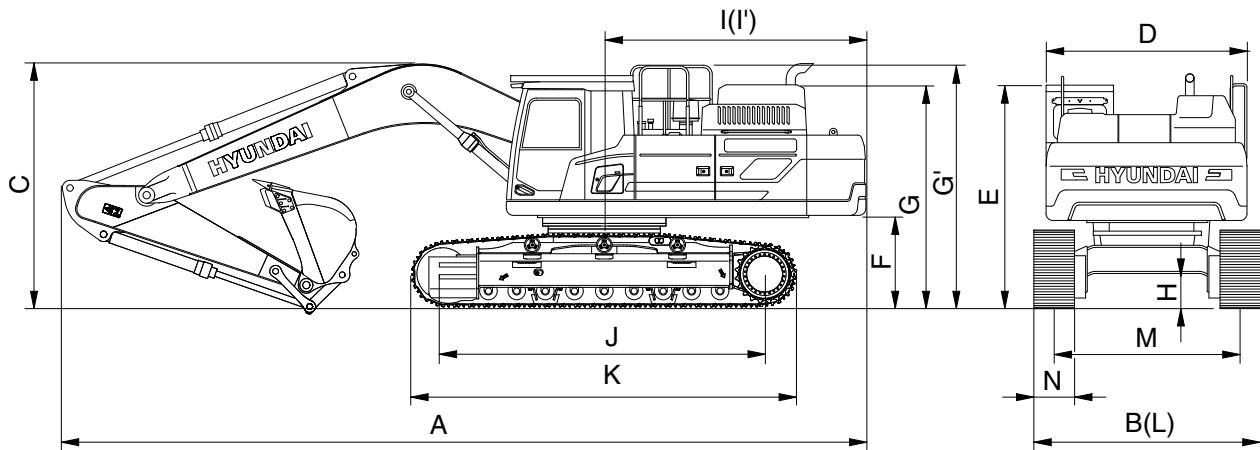
HX480A L (4/4)



480A2SP02

Description		Unit		Specification
		m (ft-in)	Boom	9.00 (29' 6")
			Arm	6.00 (19' 8")
		mm (in)	Shoe	600 (24)
Operating weight		kg (lb)		51790 (114180)
Bucket capacity (SAE heaped), standard		m³ (yd³)		1.38 (1.8)
Overall length	A	mm (ft-in)	14070 (46' 2")	
Overall width	B		3340 (10' 11")	
Overall height of boom	C		3970 (13' 0")	
Superstructure width	D		2980 (9' 9")	
Overall height of cab	E		3220 (10' 7")	
Ground clearance of counterweight	F		1300 (4' 3")	
Overall height of engine hood	G		3016 (9' 11")	
Overall height of handrail	G'		3450 (11' 4")	
Minimum ground clearance	H		565 (1' 10")	
Rear-end distance	I		3745 (12' 3")	
Rear-end swing radius	I'		3800 (12' 6")	
Distance between tumblers	J		4470 (14' 8")	
Undercarriage length (without grouser)	K		5416 (17' 9")	
Undercarriage length (with grouser)			5490 (18' 0")	
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)	
Swing speed		rpm		8.8
Gradeability		Degree (%)		35 (70)
Ground pressure		kgf/cm² (psi)		0.90 (12.8)
Max traction force		kg (lb)		39674 (87466)

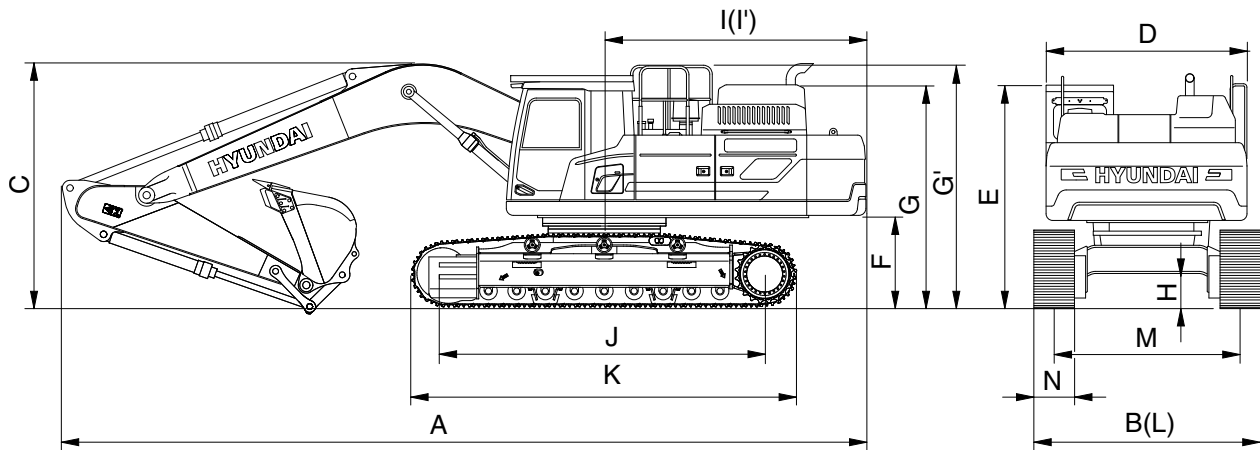
2) HX520A L (1/4)



520A2SP03

Description		Unit		Specification	
		m (ft-in)	Boom	7.06 (23' 2")	
			Arm	3.38 (11' 1")	
		mm (in)	Shoe	600 (24)	800 (32)
Operating weight		kg (lb)		52900 (116620)	53950 (118940)
Bucket capacity (SAE heaped), standard		m³ (yd³)		2.20 (2.88)	2.20 (2.88)
Overall length	A	mm (ft-in)	12160 (39' 11")		12160 (39' 11")
Overall width (transport position)	B		2980 (9' 9")		3180 (10' 5")
Overall width (working position)			3540 (11' 7")		3740 (12' 3")
Overall height of boom	C		3850 (12' 8")		3850 (12' 8")
Superstructure width	D		2980 (9' 9")		2980 (9' 9")
Overall height of cab	E		3365 (11' 0")		3365 (11' 0")
Ground clearance of counterweight	F		1445 (4' 9")		1445 (4' 9")
Overall height of engine hood	G		3310 (10' 10")		3310 (10' 10")
Overall height of handrail	G'		3595 (11' 10")		3595 (11' 10")
Minimum ground clearance	H		770 (2' 6")		770 (2' 6")
Rear-end distance	I		3745 (12' 3")		3745 (12' 3")
Rear-end swing radius	I'		3800 (12' 6")		3800 (12' 6")
Distance between tumblers	J		4470 (14' 8")		4470 (14' 8")
Undercarriage length (without grouser)	K		5416 (17' 9")		5416 (17' 9")
Undercarriage length (with grouser)			5490 (18' 0")		5490 (18' 0")
Undercarriage width (transport position)	L		2980 (9' 9")		2980 (9' 9")
Undercarriage width (working position)			3540 (11' 7")		3540 (11' 7")
Track gauge (transport position)	M		2380 (7' 10")		2380 (7' 10")
Track gauge (working position)		2940 (9' 8")		2940 (9' 8")	
Track shoe width, standard	N	600 (24")		800 (32")	
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)		3.3/5.3 (2.1/3.3)
Swing speed		rpm	8.8		8.8
Gradeability		Degree (%)	35 (70)		35 (70)
Ground pressure		kgf/cm² (psi)	0.92 (13.1)		0.70 (10.0)
Max traction force		kg (lb)	39674 (87466)		39674 (87466)

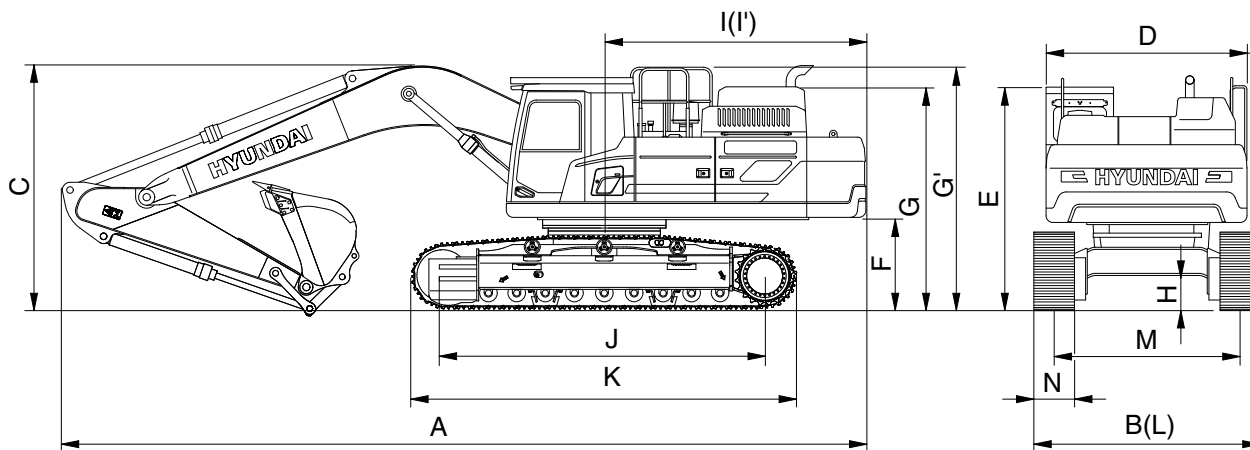
HX520A L (2/4)



520A2SP03

Description		Unit		Specification		
		m (ft-in)	Boom	7.06 (23' 2")		
			Arm	2.90 (9' 6")	4.00 (13' 1")	2.55 (8' 4")
		mm (in)	Shoe	600 (24)		
Operating weight		kg (lb)		52830 (116470)	52880 (116580)	52650 (116070)
Bucket capacity (SAE heaped), standard		m³ (yd³)		2.20 (2.88)	2.20 (2.88)	2.20 (2.88)
Overall length	A	mm (ft-in)		12210 (40' 1")	12150 (39' 10")	12200 (40' 0")
Overall width (transport position)	B			2980 (9' 9")	2980 (9' 9")	2980 (9' 9")
Overall width (working position)				3540 (11' 7")	3540 (11' 7")	3540 (11' 7")
Overall height of boom	C			3890 (12' 9")	3980 (13' 1")	3830 (12' 7")
Superstructure width	D			2980 (9' 9")	2980 (9' 9")	2980 (9' 9")
Overall height of cab	E			3365 (11' 0")	3365 (11' 0")	3365 (11' 0")
Ground clearance of counterweight	F			1445 (4' 9")	1445 (4' 9")	1445 (4' 9")
Overall height of engine hood	G			3310 (10' 10")	3310 (10' 10")	3310 (10' 10")
Overall height of handrail	G'			3595 (11' 10")	3595 (11' 10")	3595 (11' 10")
Minimum ground clearance	H			770 (2' 6")	770 (2' 6")	770 (2' 6")
Rear-end distance	I			3745 (12' 3")	3745 (12' 3")	3745 (12' 3")
Rear-end swing radius	I'			3800 (12' 6")	3800 (12' 6")	3800 (12' 6")
Distance between tumblers	J			4470 (14' 8")	4470 (14' 8")	4470 (14' 8")
Undercarriage length (without grouser)	K			5416 (17' 9")	5416 (17' 9")	5416 (17' 9")
Undercarriage length (with grouser)				5490 (18' 0")	5490 (18' 0")	5490 (18' 0")
Undercarriage width (transport position)	L			2980 (9' 9")	2980 (9' 9")	2980 (9' 9")
Undercarriage width (working position)				3540 (11' 7")	3540 (11' 7")	3540 (11' 7")
Track gauge (transport position)	M			2380 (7' 10")	2380 (7' 10")	2380 (7' 10")
Track gauge (working position)				2940 (9' 8")	2940 (9' 8")	2940 (9' 8")
Track shoe width, standard	N	600 (24")	600 (24")	600 (24")		
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)	3.3/5.3 (2.1/3.3)	3.3/5.3 (2.1/3.3)	
Swing speed		rpm	8.8	8.8	8.8	
Gradeability		Degree (%)	35 (70)	35 (70)	35 (70)	
Ground pressure		kgf/cm² (psi)	0.92 (13.0)	0.92 (13.1)	0.91 (13.0)	
Max traction force		kg (lb)	39674 (87466)	39674 (87466)	39674 (87466)	

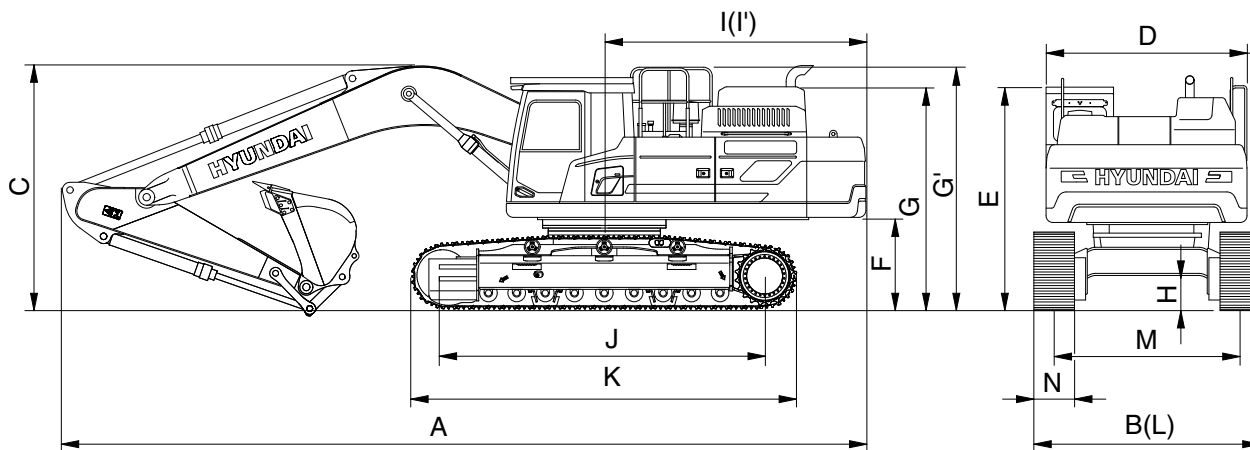
HX520A L (3/4)



520A2SP03

Description		Unit		Specification	
		m (ft-in)	Boom	6.55 (21' 6")	
			Arm	2.90 (9' 6")	2.55 (8' 4")
		mm (in)	Shoe	600 (24)	
Operating weight		kg (lb)	52610 (115990)	52440 (115610)	
Bucket capacity (SAE heaped), standard		m³ (yd³)	2.20 (2.88)	2.20 (2.88)	
Overall length	A	mm (ft-in)	11690 (38' 4")	11680 (38' 4")	
Overall width (transport position)	B		2980 (9' 9")	2980 (9' 9")	
Overall width (working position)			3540 (11' 7")	3540 (11' 7")	
Overall height of boom	C		3970 (13' 0")	3920 (12' 10")	
Superstructure width	D		2980 (9' 9")	2980 (9' 9")	
Overall height of cab	E		3365 (11' 0")	3365 (11' 0")	
Ground clearance of counterweight	F		1445 (4' 9")	1445 (4' 9")	
Overall height of engine hood	G		3310 (10' 10")	3310 (10' 10")	
Overall height of handrail	G'		3595 (11' 10")	3595 (11' 10")	
Minimum ground clearance	H		770 (2' 6")	770 (2' 6")	
Rear-end distance	I		3745 (12' 3")	3745 (12' 3")	
Rear-end swing radius	I'		3800 (12' 6")	3800 (12' 6")	
Distance between tumblers	J		4470 (14' 8")	4470 (14' 8")	
Undercarriage length (without grouser)	K		5416 (17' 9")	5416 (17' 9")	
Undercarriage length (with grouser)			5490 (18' 0")	5490 (18' 0")	
Undercarriage width (transport position)	L		2980 (9' 9")	2980 (9' 9")	
Undercarriage width (working position)			3540 (11' 7")	3540 (11' 7")	
Track gauge (transport position)	M		2380 (7' 10")	2380 (7' 10")	
Track gauge (working position)			2940 (9' 8")	2940 (9' 8")	
Track shoe width, standard	N		600 (24")	600 (24")	
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)	3.3/5.3 (2.1/3.3)	
Swing speed		rpm	8.8	8.8	
Gradeability		Degree (%)	35 (70)	35 (70)	
Ground pressure		kgf/cm² (psi)	0.91 (13.0)	0.91 (12.9)	
Max traction force		kg (lb)	39674 (87466)	39674 (87466)	

HX520A L (4/4)

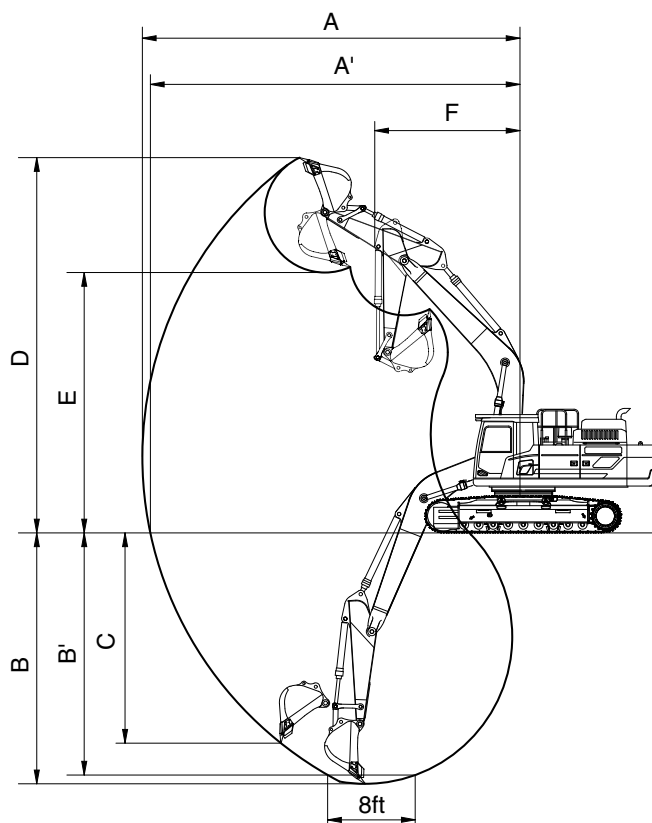


520A2SP03

Description		Unit		Specification	
		m (ft-in)	Boom	9.00 (29' 6")	
			Arm	6.00 (19' 8")	
		mm (in)	Shoe	600 (24)	
Operating weight		kg (lb)		53450 (117840)	
Bucket capacity (SAE heaped), standard		m³ (yd³)		1.38 (1.8)	
Overall length	A	mm (ft-in)	14080 (46' 2")		
Overall width (transport position)	B		2980 (9' 9")		
Overall width (working position)			3540 (11' 7")		
Overall height of boom	C		3970 (13' 0")		
Superstructure width	D		2980 (9' 9")		
Overall height of cab	E		3365 (11' 0")		
Ground clearance of counterweight	F		1445 (4' 9")		
Overall height of engine hood	G		3310 (10' 10")		
Overall height of handrail	G'		3595 (11' 10")		
Minimum ground clearance	H		770 (2' 6")		
Rear-end distance	I		3745 (12' 3")		
Rear-end swing radius	I'		3800 (12' 6")		
Distance between tumblers	J		4470 (14' 8")		
Undercarriage length (without grouser)	K		5416 (17' 9")		
Undercarriage length (with grouser)			5490 (18' 0")		
Undercarriage width (transport position)	L		2980 (9' 9")		
Undercarriage width (working position)			3540 (11' 7")		
Track gauge (transport position)	M		2380 (7' 10")		
Track gauge (working position)			2940 (9' 8")		
Track shoe width, standard	N		600 (24")		
Travel speed (low/high)			km/hr (mph)		3.3/5.3 (2.1/3.3)
Swing speed			rpm		8.8
Gradeability			Degree (%)		35 (70)
Ground pressure			kgf/cm² (psi)		0.93 (13.2)
Max traction force			kg (lb)		39674 (87466)

3. WORKING RANGE AND DIGGING FORCE

1) HX480A L (1/2)

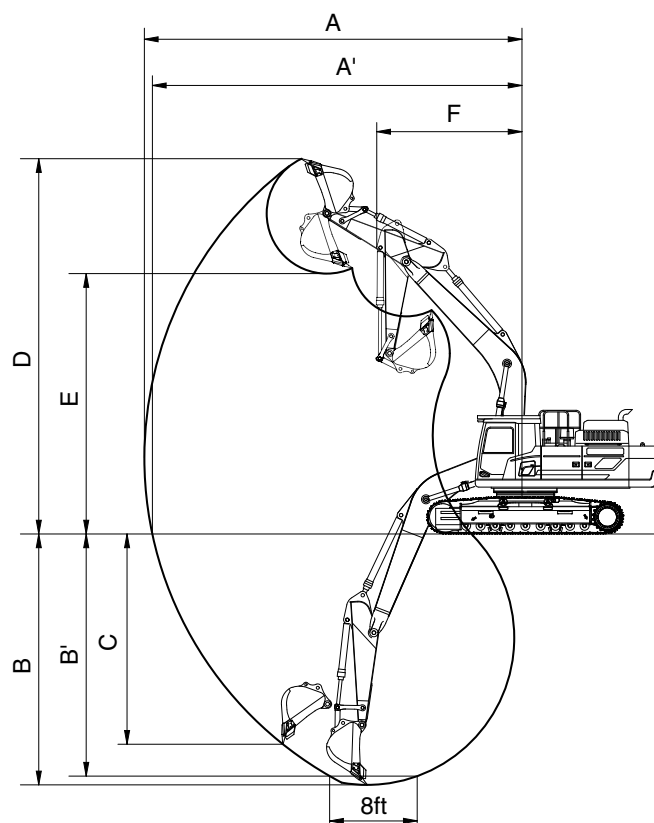


480A2SP05

Description	m (ft-in)	7.06 (23' 2")			
		Boom	2.55 (8' 4")	2.90 (9' 6")	3.38 (11' 1")
		Arm	4.00 (13' 1")		
Max digging reach	mm (ft-in)	A	11410 (37' 5")	11670 (38' 3")	12060 (39' 7")
Max digging reach on ground		A'	11190 (36' 9")	11460 (37' 7")	11850 (38' 11")
Max digging depth		B	6900 (22' 8")	7250 (23' 9")	7730 (25' 4")
Max digging depth (8 ft level)		B'	6730 (22' 1")	7090 (23' 3")	7590 (24' 11")
Max vertical wall digging depth		C	5280 (17' 4")	5710 (18' 9")	5490 (18' 0")
Max digging height		D	11070 (36' 4")	11090 (36' 5")	11060 (36' 3")
Max dumping height		E	7600 (24' 11")	7630 (25' 0")	7710 (25' 4")
Min swing radius		F	4820 (15' 10")	4880 (16' 0")	4870 (16' 0")
Bucket digging force	kN	SAE	212.8 [231.0]	212.8 [231.0]	212.8 [231.0]
	kgf		21700 [23560]	21700 [23560]	21700 [23560]
	lbf		47840 [51941]	47840 [51941]	47840 [51941]
	kN	ISO	247.1 [268.3]	247.1 [268.3]	247.1 [268.3]
	kgf		25200 [27360]	25200 [27360]	25200 [27360]
	lbf		55556 [60318]	55556 [60318]	55556 [60318]
Arm digging force	kN	SAE	235.4 [255.6]	218.7 [237.4]	198.1 [215.1]
	kgf		24000 [26060]	22300 [24210]	20200 [21930]
	lbf		52911 [57452]	49163 [53374]	44533 [48347]
	kN	ISO	246.1 [267.2]	227.5 [247.0]	205.0 [222.5]
	kgf		25100 [27250]	23200 [25190]	20900 [22690]
	lbf		55336 [60076]	51147 [55534]	46077 [50023]

[] : Power boost

HX480A L (2/2)

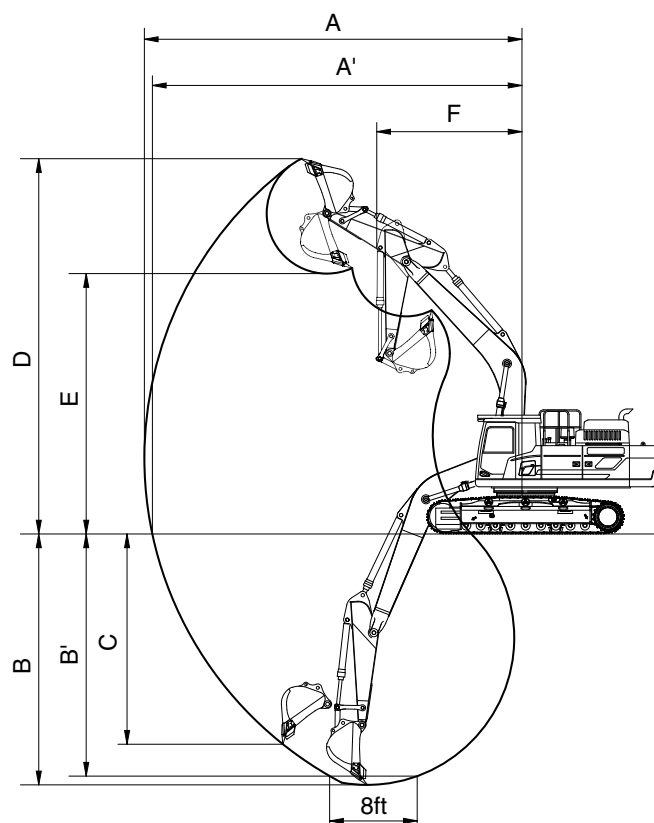


480A2SP05

Description	m (ft-in)	Boom	6.55 (21' 6")		9.00 (29' 6")
		Arm	2.90 (9' 6")	2.55 (8' 4")	6.00 (19' 8")
Max digging reach	mm (ft-in)	A	11130 (36' 6")	10870 (35' 8")	16110 (52' 10")
Max digging reach on ground		A'	10910 (35' 10")	10640 (34' 11")	15950 (52' 4")
Max digging depth		B	6810 (22' 4")	6460 (21' 2")	11710 (38' 5")
Max digging depth (8 ft level)		B'	6650 (21' 10")	6290 (20' 8")	11620 (38' 1")
Max vertical wall digging depth		C	4750 (15' 7")	4840 (15' 11")	8660 (28' 5")
Max digging height		D	10630 (34' 11")	10670 (35' 0")	13100 (43' 0")
Max dumping height		E	7240 (23' 9")	7210 (23' 8")	9800 (32' 2")
Min swing radius		F	4450 (14' 7")	4440 (14' 7")	5630 (18' 6")
Bucket digging force		kN	SAE	212.8 [231.0]	240.3 [260.9]
	kgf	21700 [23560]		24500 [26600]	21700 -
	lbf	47840 [51941]		54013 [58643]	47840 -
	kN	ISO	247.1 [268.3]	279.5 [303.4]	247.1 -
	kgf		25200 [27360]	28500 [30940]	25200 -
	lbf		55556 [60318]	62832 [68211]	55556 -
Arm digging force	kN	SAE	218.7 [237.4]	235.4 [255.6]	127.5 -
	kgf		22300 [24210]	24000 [26060]	13000 -
	lbf		49163 [53374]	52911 [57452]	28660 -
	kN	ISO	227.5 [247.0]	246.1 [267.2]	130.4 -
	kgf		23200 [25190]	25100 [27250]	13300 -
	lbf		51147 [55534]	55336 [60076]	29321 -

[] : Power boost

2) HX520A L (1/2)

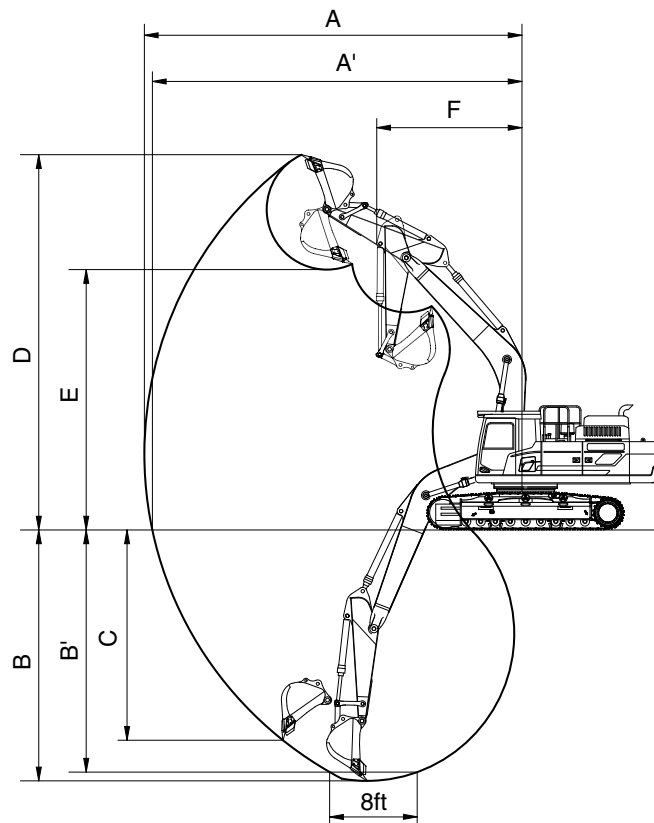


520A2SP06

Description	m (ft-in)	Boom	7.06 (23' 2")			
		Arm	2.55 (8' 4")	2.90 (9' 6")	3.38 (11' 1")	4.00 (13' 1")
Max digging reach	mm (ft-in)	A	11410 (37' 5")	11670 (38' 3")	12060 (39' 7")	12610 (41' 4")
Max digging reach on ground		A'	11170 (36' 8")	11440 (37' 6")	11840 (38' 10")	12400 (40' 8")
Max digging depth		B	6820 (22' 5")	7170 (23' 6")	7650 (25' 1")	8270 (27' 2")
Max digging depth (8 ft level)		B'	6650 (21' 10")	7010 (23' 0")	7510 (24' 8")	8140 (26' 8")
Max vertical wall digging depth		C	5200 (17' 1")	5630 (18' 6")	5410 (17' 9")	6090 (20' 0")
Max digging height		D	11150 (36' 7")	11170 (36' 8")	11140 (36' 7")	11410 (37' 5")
Max dumping height		E	7680 (25' 2")	7710 (25' 4")	7790 (25' 7")	8000 (26' 3")
Min swing radius		F	4820 (15' 10")	4880 (16' 0")	4870 (16' 0")	4630 (15' 2")
Bucket digging force	kN	SAE	240.3 [260.9]	240.3 [260.9]	240.3 [260.9]	240.3 [260.9]
	kgf		24500 [26600]	24500 [26600]	24500 [26600]	24500 [26600]
	lbf		54013 [58643]	54013 [58643]	54013 [58643]	54013 [58643]
	kN	ISO	279.5 [303.4]	279.5 [303.4]	279.5 [303.4]	279.5 [303.4]
	kgf		28500 [30940]	28500 [30940]	28500 [30940]	28500 [30940]
	lbf		62832 [68211]	62832 [68211]	62832 [68211]	62832 [68211]
Arm digging force	kN	SAE	235.4 [255.6]	218.7 [237.4]	198.1 [215.1]	173.6 [188.5]
	kgf		24000 [26060]	22300 [24210]	20200 [21930]	17700 [19220]
	lbf		52911 [57452]	49163 [53374]	44533 [48347]	39022 [42373]
	kN	ISO	246.1 [267.2]	227.5 [247.0]	205.0 [222.5]	179.5 [194.9]
	kgf		25100 [27250]	23200 [25190]	20900 [22690]	18300 [19870]
	lbf		55336 [60076]	51147 [55534]	46077 [50023]	40345 [43806]

[] : Power boost

HX520A L (2/2)



520A2SP06

Description	m (ft-in)	Boom	6.55 (21' 6")		9.00 (29' 6")
		Arm	2.90 (9' 6")	2.55 (8' 4")	6.00 (19' 8")
Max digging reach	mm (ft-in)	A	11130 (36' 6")	10870 (35' 8")	16110 (52' 10")
Max digging reach on ground		A'	10890 (35' 9")	10610 (34' 10")	15940 (52' 4")
Max digging depth		B	6730 (22' 1")	6380 (20' 11")	11550 (37' 11")
Max digging depth (8 ft level)		B'	6570 (21' 7")	6210 (20' 4")	11450 (37' 7")
Max vertical wall digging depth		C	4820 (15' 10")	4760 (15' 7")	8580 (28' 2")
Max digging height		D	10710 (35' 2")	10760 (35' 4")	13180 (43' 3")
Max dumping height		E	7320 (24' 0")	7290 (23' 11")	9880 (32' 5")
Min swing radius		F	4450 (14' 7")	4440 (14' 7")	5630 (18' 6")
Bucket digging force	kN	SAE	240.3 [260.9]	240.3 [260.9]	212.8 -
	kgf		24500 [26600]	24500 [26600]	21700 -
	lbf		54013 [58643]	54013 [58643]	47840 -
	kN	ISO	279.5 [303.4]	279.5 [303.4]	247.1 -
	kgf		28500 [30940]	28500 [30940]	25200 -
	lbf		62832 [68211]	62832 [68211]	55556 -
Arm digging force	kN	SAE	218.7 [237.4]	235.4 [255.6]	127.5 -
	kgf		22300 [24210]	24000 [26060]	13000 -
	lbf		49163 [53374]	52911 [57452]	28660 -
	kN	ISO	227.5 [247.0]	246.1 [267.2]	130.4 -
	kgf		23200 [25190]	25100 [27250]	13300 -
	lbf		51147 [55534]	55336 [60076]	29321 -

[] : Power boost

4. WEIGHT

Item	HX480A L		HX520A L	
	kg	lb	kg	lb
Upperstructure assembly				
· Main frame weld assembly	4,334	9,555	4,334	9,555
· Engine assembly	860	1,896	860	1,896
· Aftertreatment assembly	149	328	149	328
· Main pump assembly	194	428	194	428
· Main control valve assembly	421	928	421	928
· Swing motor assembly	680	1,499	680	1,499
· Hydraulic oil tank WA	290	639	290	639
· Fuel tank WA	347	765	347	765
· Counterweight	9,200	20,282	10,200	22,487
· Cab assembly	495	1,092	495	1,092
Lower chassis assembly				
· Track frame weld assembly	7,107	15,668	7,888	17,390
· Swing bearing	719	1,585	719	1,585
· Travel motor assembly (2EA)	1,264	2,787	1,264	2,787
· Turning joint	96	212	96	212
· Sprocket (2EA)	188	415	188	415
· Track recoil spring (2EA)	653	1,440	653	1,440
· Idler (2EA)	639	1,408	639	1,408
· Upper roller (HX480LA - 4EA / HX520LA - 4EA / 6EA)	350.92	774	243.84	538
· Lower roller (18EA)	1,579	3,481	1,531	3,375
· Track-chain assembly (600 mm triple grouser shoe) (2EA)	5,534	12,200	5,534	12,200
· Track-chain assembly (700 mm triple grouser shoe) (2EA)	6,054	13,347	6,054	13,347
· Track-chain assembly (800 mm triple grouser shoe) (2EA)	6,584	14,515	6,584	14,515
· Track-chain assembly (900 mm triple grouser shoe) (2EA)	7,092	15,635	-	
· Track-chain assembly (600 mm double grouser shoe) (2EA)	5,566	12,271	5,566	12,271
· Track-chain assembly (700 mm double grouser shoe) (2EA)	6,096	13,439	6,096	13,439
Front attachment assembly				
· 7.06 m boom assembly	3,640	8,025	3,640	8,025
· 3.38 m arm assembly	1,845	4,067	1,845	4,067
· 2.20 m³ SAE heaped bucket	2,020	4,453	2,020	4,453
· Boom cylinder assembly (2EA)	370	816	370	816
· Arm cylinder assembly	589	1,299	589	1,299
· Bucket cylinder assembly	363	800	363	800
· Bucket control linkage total	280	617	280	617

※ This information is different with operating and transportation weight because it is not including harness, pipe, oil, fuel so on.

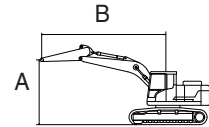
※ Refer to Transportation for actual weight information and Specifications for operating weight.

5. LIFTING CAPACITIES

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX480A L	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		7060	3380	9200	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)		9.0 m (29.5 ft)		Capacity		Reach
														m (ft)
9.0 m (29.5 ft)	kg lb							*9510 *20970	*9510 *20970			*9450 *20830	*9450 *20830	7.51 (24.6)
7.5 m (24.6 ft)	kg lb							*10350 *22820	*10350 *22820			*8950 *19730	8370 18450	8.65 (28.4)
6.0 m (19.7 ft)	kg lb							*10850 *23920	10480 23100	*9990 *22020	7740 17060	*8830 *19470	7130 15720	9.41 (30.9)
4.5 m (14.8 ft)	kg lb			*18480 *40740	*18480 *40740	*14010 *30890	*14010 *30890	*11700 *25790	10060 22180	*10330 *22770	7540 16620	*8960 *19750	6420 14150	9.89 (32.5)
3.0 m (9.8 ft)	kg lb					*15810 *34860	13210 29120	*12650 *27890	9580 21120	*10790 *23790	7290 16070	*9350 *20610	6040 13320	10.12 (33.2)
1.5 m (4.9 ft)	kg lb					*17100 *37700	12500 27560	*13410 *29560	9160 20190	*11150 *24580	7050 15540	*9890 *21800	5910 13030	10.13 (33.2)
0.0 m (0.0 ft)	kg lb			*17130 *37770	*17130 *37770	*17540 *38670	12080 26630	*13740 *30290	8860 19530	*11240 *24780	6880 15170	*9970 *21980	6010 13250	9.91 (32.5)
-1.5 m (-4.9 ft)	kg lb	*12220 *26940	*12220 *26940	*22260 *49070	18360 40480	*17080 *37650	11920 26280	*13470 *29700	8730 19250	*10780 *23770	6820 15040	*10000 *22050	6400 14110	9.44 (31.0)
-3.0 m (-9.8 ft)	kg lb	*20690 *45610	*20690 *45610	*19920 *43920	18560 40920	*15660 *34520	11980 26410	*12340 *27210	8760 19310			*9900 *21830	7230 15940	8.69 (28.5)
-4.5 m (-14.8 ft)	kg lb	*19790 *43630	*19790 *43630	*16250 *35830	*16250 *35830	*12920 *28480	12250 27010	*9580 *21120	9040 19930			*9390 *20700	8940 19710	7.57 (24.8)

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 with your local Hyundai dealer regarding the lifting capacities for specific work tools and attachments.

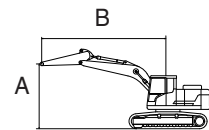
▲ Failure to comply to the rated load can cause serious injury, death, or property damage.

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

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX480A L	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		7060	2550	9200	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)		9.0 m (29.5 ft)		Capacity		Reach
														m (ft)
9.0 m (29.5 ft)	kg lb											*12380 *27290	*12380 *27290	6.60 (21.6)
7.5 m (24.6 ft)	kg lb							*11560 *25490	10500 23150			*11490 *25330	9630 21230	7.87 (25.8)
6.0 m (19.7 ft)	kg lb					*13640 *30070	*13640 *30070	*11840 *26100	10300 22710			*11100 *24470	8030 17700	8.71 (28.6)
4.5 m (14.8 ft)	kg lb					*15260 *33640	13770 30360	*12560 *27690	9920 21870	*11060 *24380	7470 16470	*10910 *24050	7170 15810	9.22 (30.3)
3.0 m (9.8 ft)	kg lb					*16820 *37080	12950 28550	*13340 *29410	9490 20920	*11320 *24960	7280 16050	*10840 *23900	6730 14840	9.47 (31.1)
1.5 m (4.9 ft)	kg lb					*17670 *38960	12390 27320	*13860 *30560	9150 20170	*11470 *25290	7100 15650	*10810 *23830	6600 14550	9.48 (31.1)
0.0 m (0.0 ft)	kg lb					*17570 *38740	12130 26740	*13880 *30600	8940 19710	*11210 *24710	7010 15450	*10770 *23740	6770 14930	9.24 (30.3)
-1.5 m (-4.9 ft)	kg lb			*20510 *45220	18740 41310	*16560 *36510	12110 26700	*13170 *29030	8900 19620			*10610 *23390	7320 16140	8.74 (28.7)
-3.0 m (-9.8 ft)	kg lb	*19190 *42310	*19190 *42310	*17720 *39070	*17720 *39070	*14510 *31990	12280 27070	*11260 *24820	9060 19970			*10150 *22380	8480 18700	7.92 (26.0)
-4.5 m (-14.8 ft)	kg lb			*13240 *29190	*13240 *29190	*10610 *23390	*10610 *23390					*8830 *19470	*8830 *19470	6.66 (21.9)

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 with your local Hyundai dealer regarding the lifting capacities for specific work tools and attachments.

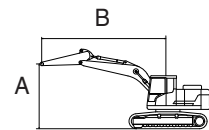
▲ Failure to comply to the rated load can cause serious injury, death, or property damage.

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

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX480A L	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		7060	2900	9200	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)		9.0 m (29.5 ft)		Capacity		Reach
														m (ft)
9.0 m (29.5 ft)	kg lb											*11510 *25380	*11510 *25380	6.97 (22.9)
7.5 m (24.6 ft)	kg lb							*10980 *24210	10580 23320			*10810 *23830	9050 19950	8.19 (26.9)
6.0 m (19.7 ft)	kg lb					*13030 *28730	*13030 *28730	*11370 *25070	10330 22770			*10500 *23150	7610 16780	8.99 (29.5)
4.5 m (14.8 ft)	kg lb			*19780 *43610	*19780 *43610	*14660 *32320	13840 30510	*12140 *26760	9910 21850	*10690 *23570	7450 16420	*10370 *22860	6810 15010	9.49 (31.1)
3.0 m (9.8 ft)	kg lb					*16310 *35960	12960 28570	*12980 *28620	9450 20830	*11040 *24340	7220 15920	*10340 *22800	6390 14090	9.74 (31.9)
1.5 m (4.9 ft)	kg lb					*17350 *38250	12310 27140	*13600 *29980	9070 20000	*11280 *24870	7010 15450	*10360 *22840	6250 13780	9.74 (32.0)
0.0 m (0.0 ft)	kg lb			*14480 *31920	*14480 *31920	*17470 *38510	11980 26410	*13750 *30310	8820 19440	*11190 *24670	6880 15170	*10380 *22880	6390 14090	9.51 (31.2)
-1.5 m (-4.9 ft)	kg lb			*21210 *46760	18400 40570	*16700 *36820	11910 26260	*13230 *29170	8740 19270	*10370 *22860	6880 15170	*10320 *22750	6860 15120	9.02 (29.6)
-3.0 m (-9.8 ft)	kg lb	*21630 *47690	*21630 *47690	*18580 *40960	*18580 *40960	*14930 *32910	12040 26540	*11720 *25840	8840 19490			*10040 *22130	7870 17350	8.23 (27.0)
-4.5 m (-14.8 ft)	kg lb			*14450 *31860	*14450 *31860	*11610 *25600	*11610 *25600					*9130 *20130	*9130 *20130	7.04 (23.1)

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 with your local Hyundai dealer regarding the lifting capacities for specific work tools and attachments.

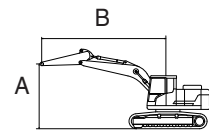
▲ Failure to comply to the rated load can cause serious injury, death, or property damage.

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

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX480A L	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		7060	3380	9200	800	-	-	-	-	-

·  : 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)		9.0 m (29.5 ft)		Capacity		Reach
														m (ft)
9.0 m (29.5 ft)	kg lb							*9510 *20970	*9510 *20970			*9450 *20830	*9450 *20830	7.51 (24.6)
7.5 m (24.6 ft)	kg lb							*10350 *22820	*10350 *22820			*8950 *19730	8570 18890	8.65 (28.4)
6.0 m (19.7 ft)	kg lb							*10850 *23920	10720 23630	*9990 *22020	7920 17460	*8830 *19470	7310 16120	9.41 (30.9)
4.5 m (14.8 ft)	kg lb			*18480 *40740	*18480 *40740	*14010 *30890	*14010 *30890	*11700 *25790	10290 22690	*10330 *22770	7730 17040	*8960 *19750	6590 14530	9.89 (32.5)
3.0 m (9.8 ft)	kg lb					*15810 *34860	13530 29830	*12650 *27890	9810 21630	*10790 *23790	7480 16490	*9350 *20610	6210 13690	10.12 (33.2)
1.5 m (4.9 ft)	kg lb					*17100 *37700	12810 28240	*13410 *29560	9390 20700	*11150 *24580	7240 15960	*9890 *21800	6070 13380	10.13 (33.2)
0.0 m (0.0 ft)	kg lb			*17130 *37770	*17130 *37770	*17540 *38670	12390 27320	*13740 *30290	9100 20060	*11240 *24780	7070 15590	*9970 *21980	6180 13620	9.91 (32.5)
-1.5 m (-4.9 ft)	kg lb	*12220 *26940	*12220 *26940	*22260 *49070	18830 41510	*17080 *37650	12240 26980	*13470 *29700	8970 19780	*10780 *23770	7000 15430	*10000 *22050	6580 14510	9.44 (31.0)
-3.0 m (-9.8 ft)	kg lb	*20690 *45610	*20690 *45610	*19920 *43920	19030 41950	*15660 *34520	12290 27090	*12340 *27210	9000 19840			*9900 *21830	7430 16380	8.69 (28.5)
-4.5 m (-14.8 ft)	kg lb	*19790 *43630	*19790 *43630	*16250 *35830	*16250 *35830	*12920 *28480	12570 27710	*9580 *21120	9280 20460			*9390 *20700	9170 20220	7.57 (24.8)

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 with your local Hyundai dealer regarding the lifting capacities for specific work tools and attachments.

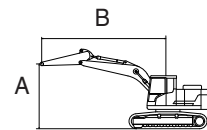
▲ Failure to comply to the rated load can cause serious injury, death, or property damage.

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

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
HX480A L	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		7060	4000	9200	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)		9.0 m (29.5 ft)		10.5 m (34.4 ft)		Capacity		Reach
																		m (ft)
9.0m	kg															*7340	*7340	8.24
29.5ft	lb															*16180	*16180	(27.0)
7.5m	kg											*8410	8030			*7010	*7010	9.29
24.6ft	lb											*18540	17700			*15450	*15450	(30.5)
6.0m	kg									*10200	*10200	*9450	7920			*6930	6560	10.01
19.7ft	lb									*22490	*22490	*20830	17460			*15280	14460	(32.8)
4.5m	kg							*13140	*13140	*11140	10280	*9910	7700			*7030	5960	10.46
14.8ft	lb							*28970	*28970	*24560	22660	*21850	16980			*15500	13140	(34.3)
3.0m	kg					*20800	20710	*15100	13570	*12210	9780	*10480	7420	*8720	5790	*7320	5630	10.68
9.8ft	lb					*45860	45660	*33290	29920	*26920	21560	*23100	16360	*19220	12760	*16140	12410	(35.0)
1.5m	kg					*20070	19240	*16700	12770	*13140	9320	*10990	7150	*9480	5660	*7820	5510	10.68
4.9ft	lb					*44250	42420	*36820	28150	*28970	20550	*24230	15760	*20900	12480	*17240	12150	(35.0)
0.0m	kg					*19100	18580	*17520	12250	*13700	8980	*11260	6950			*8600	5580	10.47
0.0ft	lb					*42110	40960	*38620	27010	*30200	19800	*24820	15320			*18960	12300	(34.4)
-1.5m	kg			*12230	*12230	*23290	18400	*17450	12000	*13710	8780	*11110	6830			*9540	5890	10.03
-4.9ft	lb			*26960	*26960	*51350	40570	*38470	26460	*30230	19360	*24490	15060			*21030	12990	(32.9)
-3.0m	kg	*14130	*14130	*18540	*18540	*21430	18500	*16470	11980	*12980	8750	*10210	6850			*9570	6540	9.33
-9.8ft	lb	*31150	*31150	*40870	*40870	*47250	40790	*36310	26410	*28620	19290	*22510	15100			*21100	14420	(30.6)
-4.5m	kg			*23840	*23840	*18340	*18340	*14340	12150	*11120	8900					*9360	7810	8.30
-14.8ft	lb			*52560	*52560	*40430	*40430	*31610	26790	*24520	19620					*20640	17220	(27.2)
-6.0m	kg					*13350	*13350	*10290	*10290							*8450	*8450	6.78
-19.7ft	lb					*29430	*29430	*22690	*22690							*18630	*18630	(22.3)

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 with your local Hyundai dealer regarding the lifting capacities for specific work tools and attachments.

▲ Failure to comply to the rated load can cause serious injury, death, or property damage.

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

This as a preview PDF file from **best-manuals.com**



Download full PDF manual at **best-manuals.com**