

SECTION 1 GENERAL



Group 1 Safety Hints 1-1

Group 2 Specifications 1-9

SECTION 1 GENERAL

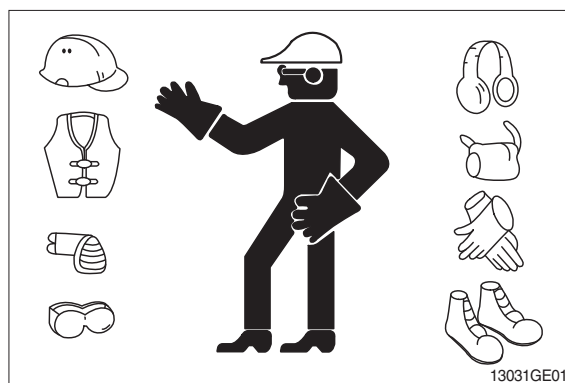
GROUP 1 SAFETY

FOLLOW SAFE PROCEDURE

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

WEAR PROTECTIVE CLOTHING

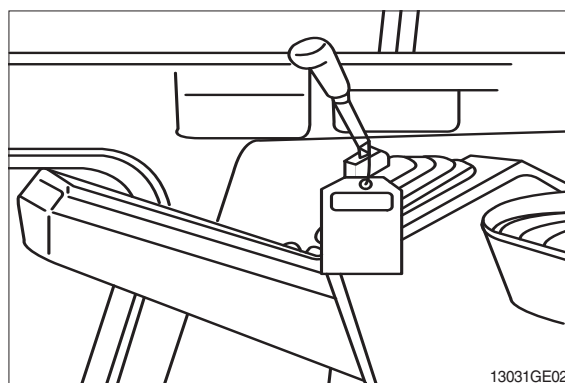
Wear close fitting clothing and safety equipment appropriate to the job.



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.



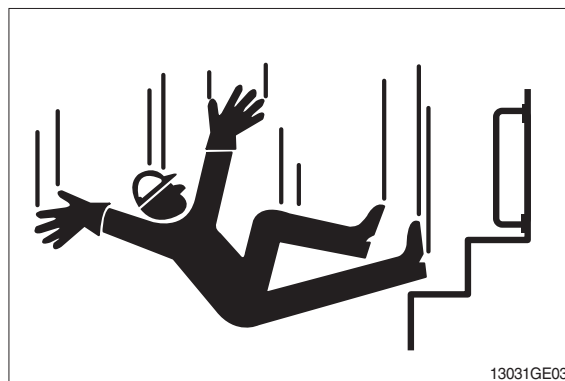
USE HANDHOLDS AND STEPS

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.

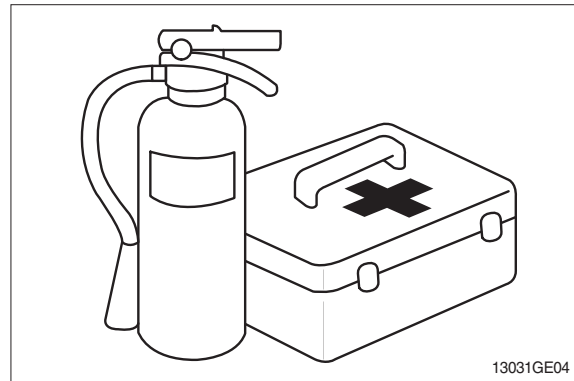


PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

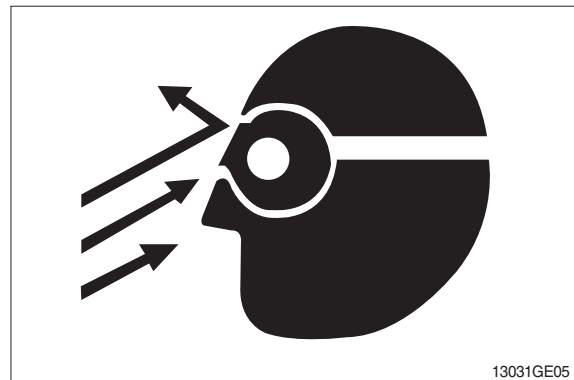
Keep a first aid kit and fire extinguisher handy.

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



PROTECT AGAINST FLYING DEBRIS

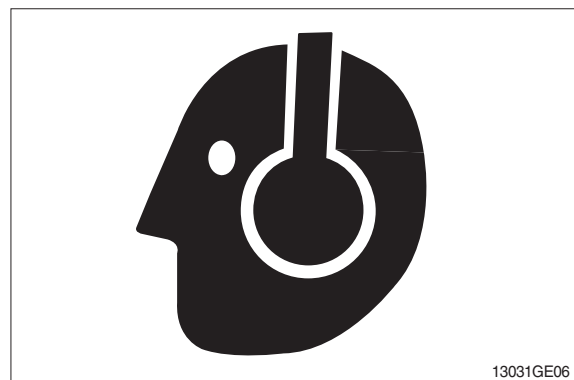
Guard against injury from flying pieces of metal or debris; wear goggles or safety glasses.



PROTECT AGAINST NOISE

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

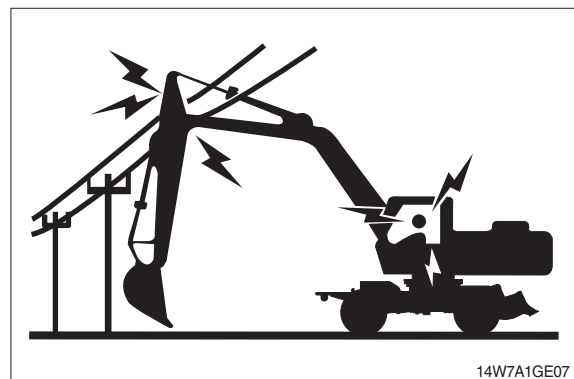
Wear a suitable hearing protective device such as ear-muffs or earplugs to protect against objectionable or uncomfortable loud noises.



AVOID POWER LINES

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

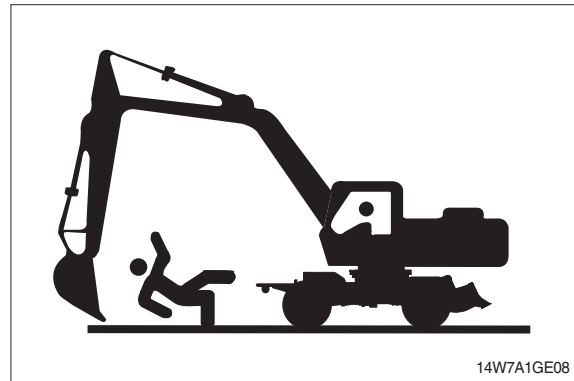
Never move any part of the machine or load closer to electric line than 3m(10ft) plus twice the line insulator length.



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.

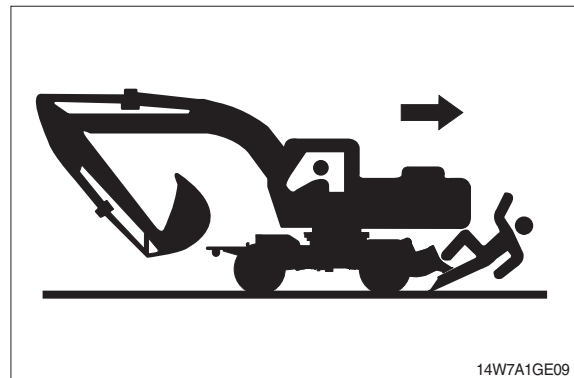


MOVE AND OPERATE MACHINE SAFELY

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:

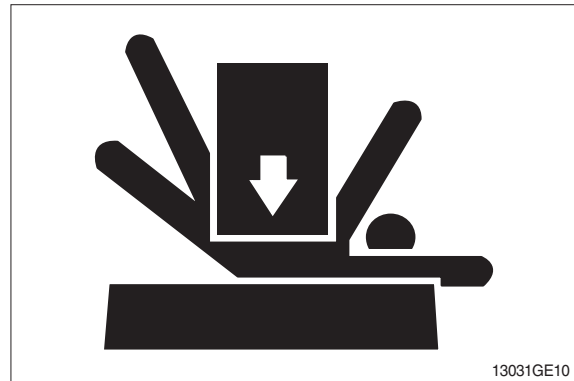
- Park machine on a level surface.
- Lower bucket to the ground.
- Turn auto idle switch off.
- Run engine at 1/2 speed without load for 2 minutes.
- Turn key switch to OFF to stop engine.
Remove key from switch.
- Move pilot control shutoff lever to locked position.
- Allow engine to cool.

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.

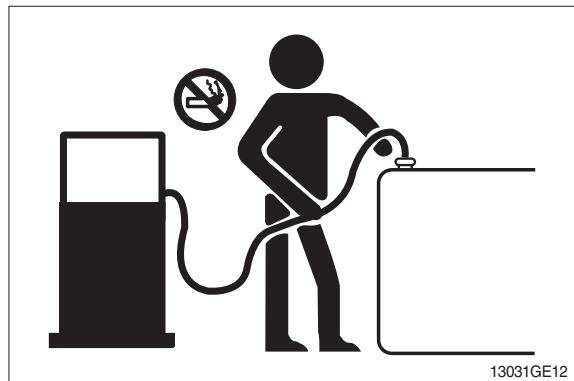
Shut off engine. Only remove filler cap when cool enough to touch with bare hands.



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

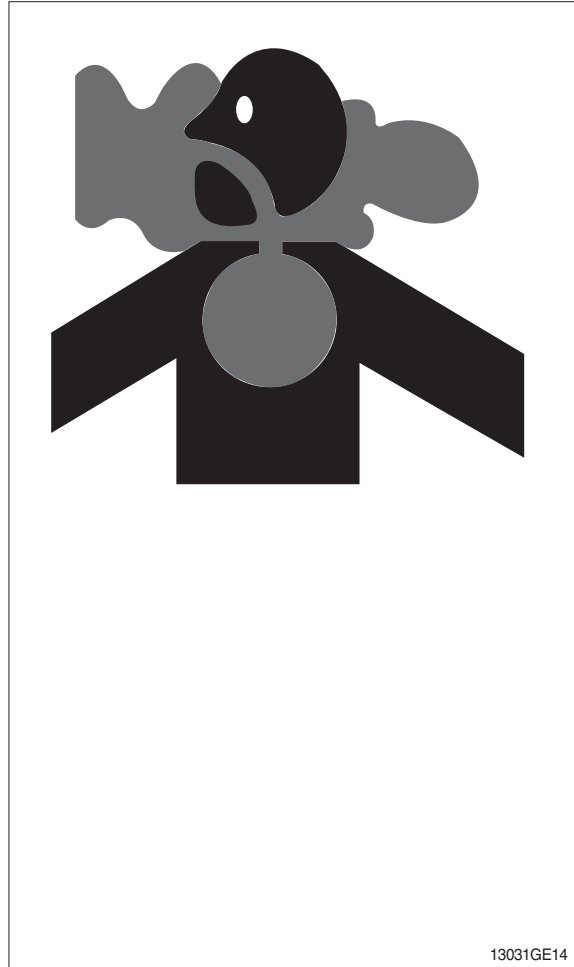
Avoid potentially toxic fumes and dust.

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

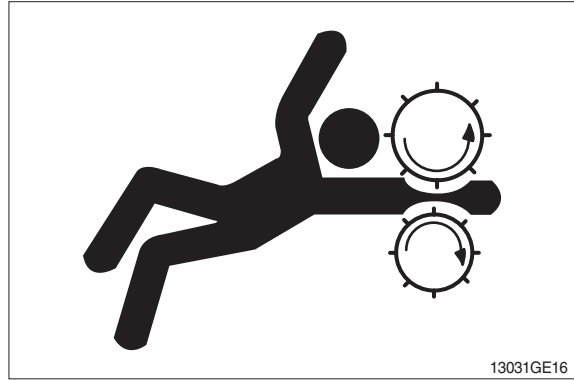
Illuminate your work area adequately but safely. Use a portable safety light for working inside or under the machine. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.



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.

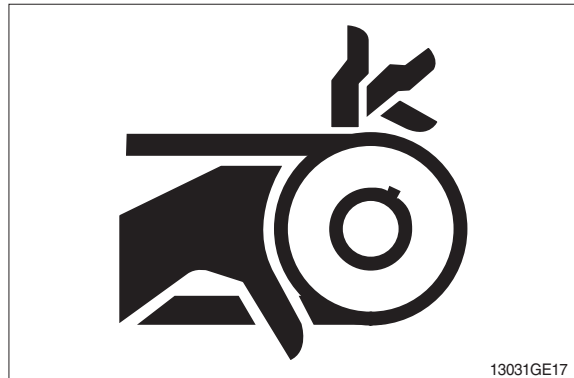
Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.



STAY CLEAR OF MOVING PARTS

Entanglements in moving parts can cause serious injury.

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



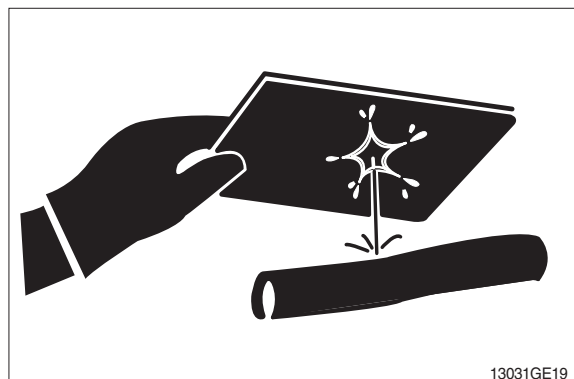
AVOID HIGH PRESSURE FLUIDS

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:

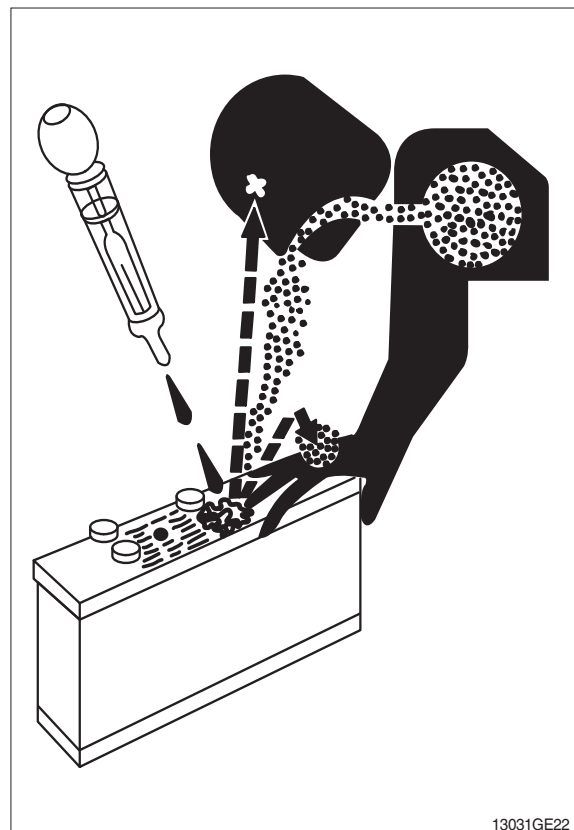
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

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.



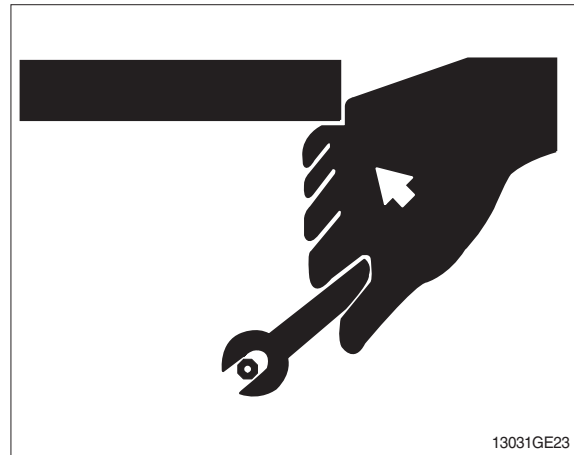
USE TOOLS PROPERLY

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 manual.)

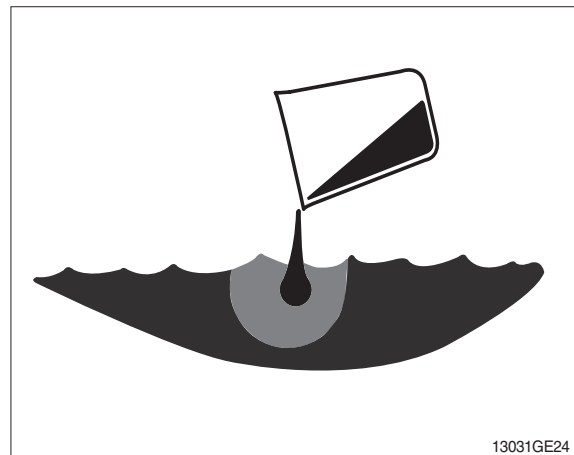


DISPOSE OF FLUIDS PROPERLY

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.

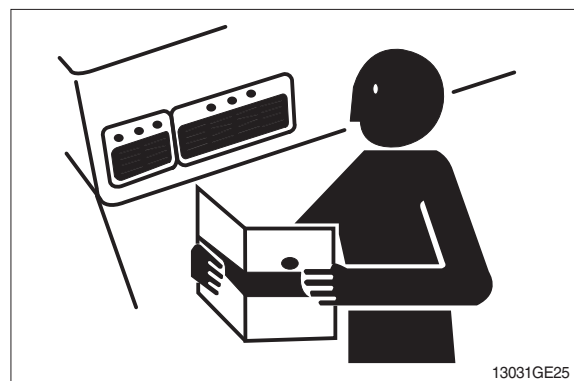
Use proper containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

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.

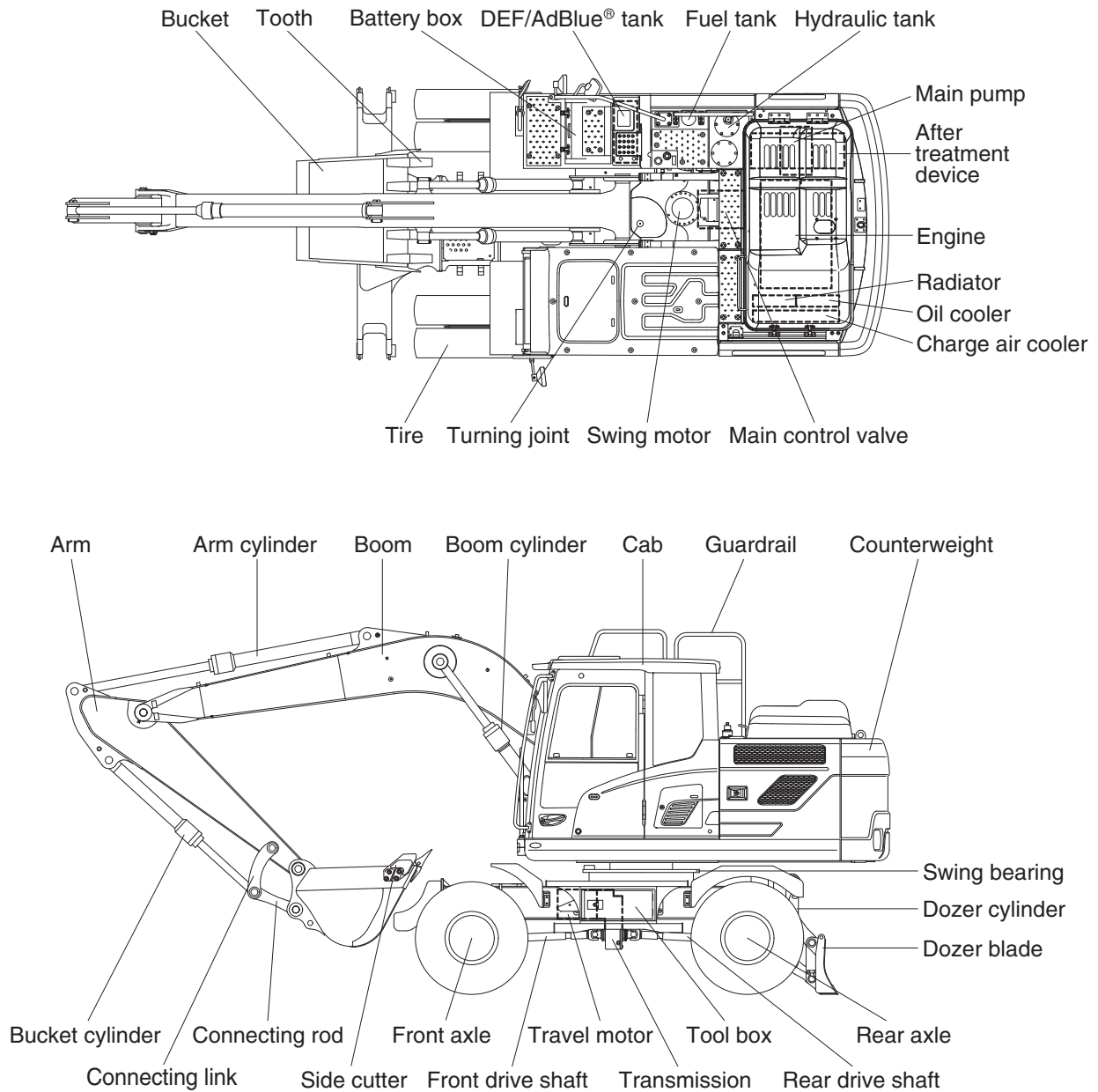


LIVE WITH SAFETY

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

GROUP 2 SPECIFICATIONS

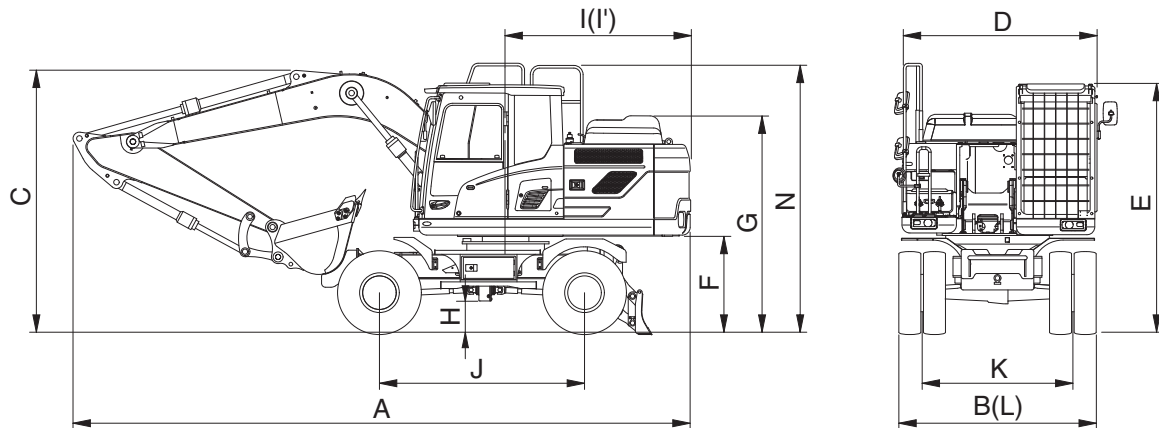
1. MAJOR COMPONENT



140WF2SP01

2. SPECIFICATIONS

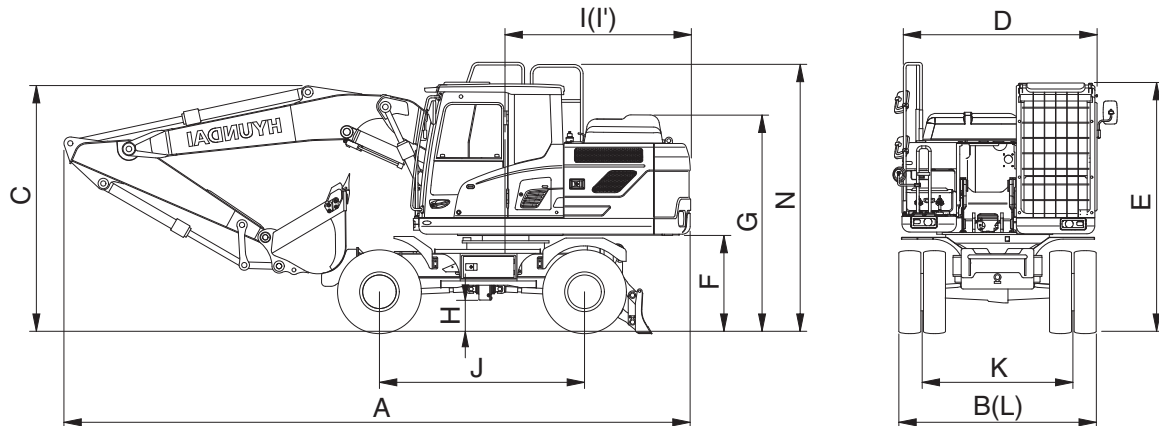
1) 4.6 m (15' 1") MONO BOOM, 2.1 m (6' 11") ARM AND REAR DOZER BLADE



140WF2SP02

Description		Unit	Specification
Operating weight		kg (lb)	13880 (30600)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.58 (0.76)
Overall length	A	mm (ft-in)	7760 (25' 6")
Overall width	B		2500 (8' 2")
Overall height of boom	C		3500 (11' 6")
Upperstructure width	D		2475 (8' 1")
Cab height	E		3140 (10' 4")
Ground clearance of counterweight	F		1210 (4' 0")
Engine cover height	G		2740 (9' 0")
Minimum ground clearance	H		397 (1' 4")
Rear-end distance	I		2330 (7' 8")
Rear-end swing radius	I'		2330 (7' 8")
Wheel base	J		2600 (8' 6")
Tread	K		1944 (6' 5")
Dozer blade width	L		2490 (8' 2")
Overall height of guardrail	N		3390 (11' 1")
Travel speed	Low	km/hr (mph)	10 (6.2)
	High		39 (24.2)
	Creep		3.5 (2.2)
Swing speed		rpm	11.6
Gradeability		Degree (%)	35 (70)
Max traction force		kgf (lbf)	7800 (17200)

2) 4.9 m (16' 1") ADJUST BOOM, 2.1 m (6' 11") ARM AND REAR DOZER BLADE

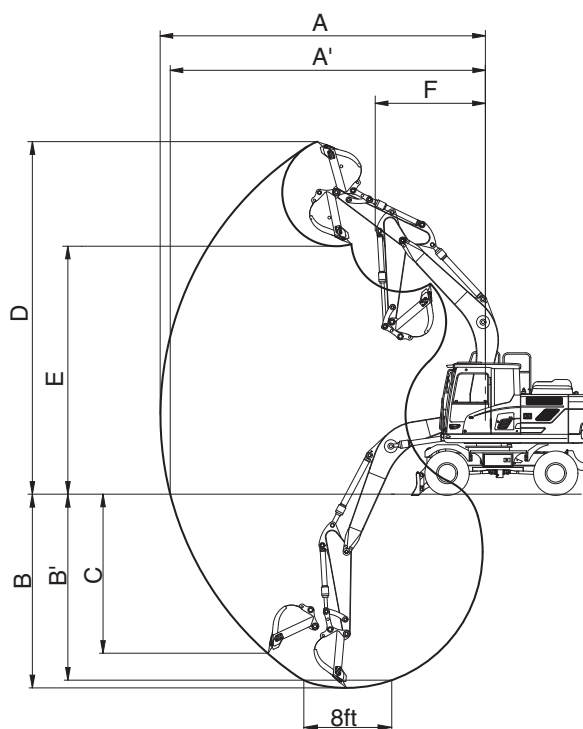


140WF2SP03

Description		Unit	Specification
Operating weight		kg (lb)	14280 (31480)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.58 (0.76)
Overall length	A	mm (ft-in)	6110 (20' 1")
Overall width	B		2500 (8' 2")
Overall height of boom	C		3980 (13' 1")
Upperstructure width	D		2475 (8' 1")
Cab height	E		3140 (10' 4")
Ground clearance of counterweight	F		1210 (4' 0")
Engine cover height	G		2740 (9' 0")
Minimum ground clearance	H		397 (1' 4")
Rear-end distance	I		2330 (7' 8")
Rear-end swing radius	I'		2330 (7' 8")
Wheel base	J		2600 (8' 6")
Tread	K		1944 (6' 5")
Dozer blade width	L		2490 (8' 2")
Overall height of guardrail	N		3390 (11' 1")
Travel speed	Low	km/hr (mph)	10 (6.2)
	High		39 (24.2)
	Creep		3.5 (2.2)
Swing speed		rpm	11.6
Gradeability		Degree (%)	35 (70)
Max traction force		kgf (lbf)	7800 (17200)

3. WORKING RANGE

1) 4.6 m (15' 1") MONO BOOM

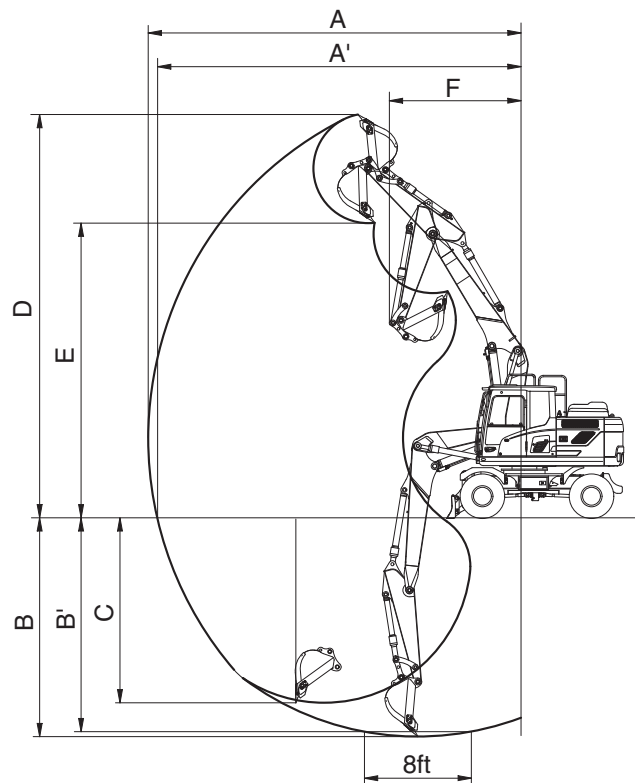


140WF2SP04

Description		1.9 m (6' 3") Arm	*2.1 m (6' 11") Arm	2.5 m (8' 2") Arm	3.0 m (9' 10") Arm
Max digging reach	A	7750 mm (25' 5")	7920 mm (26' 0")	8320 mm (27' 4")	8780 mm (28'10")
Max digging reach on ground	A'	7530 mm (24' 8")	7700 mm (25' 3")	8120 mm (26' 8")	8590 mm (28' 2")
Max digging depth	B	4650 mm (15' 3")	4850 mm (15'11")	5250 mm (17' 3")	5750 mm (18'10")
Max digging depth (8 ft level)	B'	4390 mm (14' 5")	4600 mm (15' 1")	5040 mm (16' 6")	5570 mm (18' 3")
Max vertical wall digging depth	C	4350 mm (14' 3")	4460 mm (14' 8")	5030 mm (16' 6")	5550 mm (18' 3")
Max digging height	D	8400 mm (27' 7")	8470 mm (27' 9")	8790 mm (28'10")	9070 mm (29' 9")
Max dumping height	E	5960 mm (19' 7")	6040 mm (19'10")	6350 mm (20'10")	6620 mm (21' 9")
Min swing radius	F	2620 mm (8' 7")	2670 mm (8' 10")	2650 mm (8' 8")	2670 mm (8' 9")
Bucket digging force	SAE	87.3 [95] kN	87.3 [95] kN	87.3 [95] kN	87.3 [95] kN
		8800 [9660] kgf	8800 [9660] kgf	8800 [9660] kgf	8800 [9660] kgf
		19620 [21300] lbf	19620 [21300] lbf	19620 [21300] lbf	19620 [21300] lbf
	ISO	102 [110.8] kN	102 [110.8] kN	102 [110.8] kN	102 [110.8] kN
		10400 [11290] kgf	10400 [11290] kgf	10400 [11290] kgf	10400 [11290] kgf
		22930 [24890] lbf	22930 [24890] lbf	22930 [24890] lbf	22930 [24890] lbf
Arm digging force	SAE	76.5 [83.1] kN	73.6 [79.9] kN	62.8 [68.2] kN	55.9 [60.7] kN
		7800 [8470] kgf	7500 [8140] kgf	6400 [6950] kgf	5700 [6190] kgf
		17200 [18670] lbf	16530 [17950] lbf	14110 [15320] lbf	12570 [13640] lbf
	ISO	80.4 [87.3] kN	77.5 [84.1] kN	65.7 [71.4] kN	57.9 [62.8] kN
		8200 [8900] kgf	7900 [8580] kgf	6700 [7270] kgf	5900 [6410] kgf
		18080 [19630] lbf	17420 [18910] lbf	14770 [16040] lbf	13010 [14120] lbf

* : Standard [] : Power boost

2) 4.9 m (16' 1") ADJUST BOOM



140WF2SP05

Description		1.9 m (6' 3") Arm	2.1 m (6' 11") Arm	2.5 m (8' 2") Arm
Max digging reach	A	8140 mm (26' 8")	8310 mm (27' 3")	8720 mm (28' 7")
Max digging reach on ground	A'	7930 mm (26' 0")	8110 mm (26' 7")	8530 mm (28' 0")
Max digging depth	B	4810 mm (15' 9")	5010 mm (16' 5")	5410 mm (17' 9")
Max digging depth (8 ft level)	B'	4700 mm (15' 5")	4890 mm (16' 1")	5310 mm (17' 5")
Max vertical wall digging depth	C	4190 mm (13' 9")	4360 mm (14' 4")	4820 mm (15' 10")
Max digging height	D	9100 mm (29' 10")	9180 mm (30' 1")	9560 mm (31' 4")
Max dumping height	E	6620 mm (21' 9")	6700 mm (22' 0")	7070 mm (23' 2")
Min swing radius	F	2660 mm (8' 9")	2820 mm (9' 3")	2690 mm (8' 10")
Bucket digging force	SAE	87.3 [94.8] kN	87.3 [94.8] kN	87.3 [94.8] kN
		8800 [9600] kgf	8800 [9600] kgf	8800 [9600] kgf
		19620 [21300] lbf	19620 [21300] lbf	19620 [21300] lbf
	ISO	102 [110.8] kN	102 [110.8] kN	102 [110.8] kN
		10400 [11290] kgf	10400 [11290] kgf	10400 [11290] kgf
		22930 [24890] lbf	22930 [24890] lbf	22930 [24890] lbf
Arm digging force	SAE	76.5 [83.1] kN	73.6 [79.9] kN	62.8 [68.2] kN
		7800 [8470] kgf	7500 [8140] kgf	6400 [6950] kgf
		17200 [18670] lbf	16530 [17950] lbf	14110 [15320] lbf
	ISO	80.4 [87.3] kN	77.5 [84.1] kN	65.7 [71.4] kN
		8200 [8900] kgf	7900 [8580] kgf	6700 [7270] kgf
		18080 [19630] lbf	17420 [18910] lbf	14770 [16040] lbf

[] : Power boost

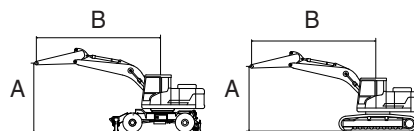
4. WEIGHT

Item	HW140	
	kg	lb
Upperstructure assembly	4510	9940
Main frame weld assembly	1180	2600
Engine assembly	520	1150
Main pump assembly	100	220
Main control valve assembly	135	300
Swing motor assembly	120	265
Hydraulic oil tank assembly	180	400
Fuel tank assembly	140	310
Counterweight	1700	3750
Cab assembly	500	1100
Lower frame weld assembly	1340	2950
Swing bearing	210	465
Travel motor assembly	60	130
Turning joint	120	265
Transmission assembly	140	310
Front axle assembly	520	1150
Rear axle assembly	480	1060
Dozer blade assembly (front)	590	1300
Dozer blade assembly (rear)	560	1240
Front attachment assembly (4.6 m boom, 2.1 m arm, 0.58 m ³ SAE heaped bucket)	2380	5250
4.6 m boom assembly	830	1830
4.9 m adjustable boom assembly	1150	2540
2.1 m arm assembly	385	850
0.58 m ³ SAE heaped bucket assembly	480	1060
Boom cylinder assembly	121	267
Arm cylinder assembly	171	377
Bucket cylinder assembly	123	271
Bucket control link assembly	90	200
2.5 m arm assembly	435	960
Oscillating cylinder assembly	30	70
Front outrigger assembly	800	1765
Rear outrigger assembly	790	1740
Adjustable boom cylinder assembly	120	260
Adjustable cylinder assembly	180	400
Outrigger cylinder assembly	110	240
Blade cylinder assembly (front)	45	100
Blade cylinder assembly (rear)	50	110

5. LIFTING CAPACITIES

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	1900	1700	-	500	-	Down	-	-

 : 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)		Capacity		Reach
												m (ft)
6.0 m (19.7 ft)	kg lb					*4140 *9130	*4140 *9130			*3560 *7850	*3560 *7850	4.95 (16.2)
4.5 m (14.8 ft)	kg lb					*4450 *9810	4200 9260			*3320 *7320	2690 5930	5.92 (19.4)
3.0 m (9.8 ft)	kg lb					*5400 *11900	3990 8800	3600 7940	2580 5690	3250 7170	2330 5140	6.39 (21.0)
1.5 m (4.9 ft)	kg lb					5480 12080	3790 8360	3510 7740	2500 5510	3120 6880	2230 4920	6.49 (21.3)
Ground Line	kg lb			*6540 *14420	*6540 *14420	5360 11820	3680 8110	3460 7630	2450 5400	3290 7250	2340 5160	6.22 (20.4)
-1.5 m (-4.9 ft)	kg lb	*6610 *14570	*6610 *14570	*9530 *21010	7060 15560	5360 11820	3680 8110			3910 8620	2760 6080	5.54 (18.2)
-3.0 m (-9.8 ft)	kg lb			*7420 *16360	7250 15980					*5070 *11180	4170 9190	4.24 (13.9)

Note 1. Lifting capacity are based on SAE J1097 and 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.

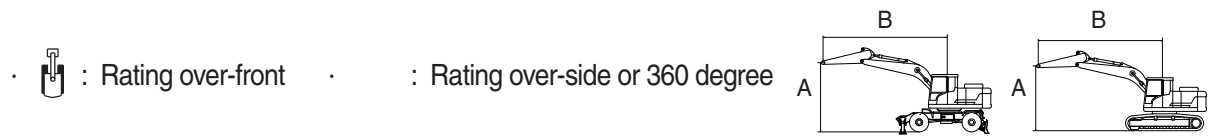
The difference between the weight of a work tool attachment must be subtracted.

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.

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	1900	1700	-	500	-	Up	-	-



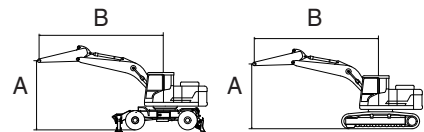
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
6.0 m (19.7 ft)	kg					*4140	*4140			*3560	*3560	4.95
	lb					*9130	*9130			*7850	*7850	(16.2)
4.5 m (14.8 ft)	kg					*4450	4210			*3320	2700	5.92
	lb					*9810	9280			*7320	5950	(19.4)
3.0 m (9.8 ft)	kg					*5400	4000	3600	2580	3250	2340	6.39
	lb					*11900	8820	7940	5690	7170	5160	(21.0)
1.5 m (4.9 ft)	kg					5480	3800	3510	2510	3120	2240	6.49
	lb					12080	8380	7740	5530	6880	4940	(21.3)
Ground Line	kg			*6540	*6540	5360	3690	3460	2460	3290	2340	6.22
	lb			*14420	*14420	11820	8140	7630	5420	7250	5160	(20.4)
-1.5 m (-4.9 ft)	kg	*6610	*6610	*9530	7080	5360	3690			3910	2760	5.54
	lb	*14570	*14570	*21010	15610	11820	8140			8620	6080	(18.2)
-3.0 m (-9.8 ft)	kg			*7420	7270					*5070	4180	4.24
	lb			*16360	16030					*11180	9220	(13.9)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	1900	2200	-	500	-	Down	-	-



: Rating over-front

: Rating over-side or 360 degree



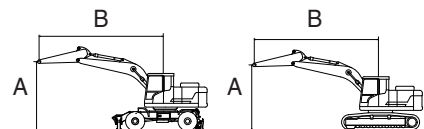
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
6.0 m	kg					*4140	*4140			*3560	*3560	4.95
(19.7 ft)	lb					*9130	*9130			*7850	*7850	(16.2)
4.5 m	kg					*4450	*4450			*3320	2960	5.92
(14.8 ft)	lb					*9810	*9810			*7320	6530	(19.4)
3.0 m	kg					*5400	4380	3910	2840	*3350	2580	6.39
(9.8 ft)	lb					*11900	9660	8620	6260	*7390	5690	(21.0)
1.5 m	kg					5960	4180	3830	2770	3410	2470	6.49
(4.9 ft)	lb					13140	9220	8440	6110	7520	5450	(21.3)
Ground	kg			*6540	*6540	5840	4070	3780	2720	3590	2590	6.22
Line	lb			*14420	*14420	12870	8970	8330	6000	7910	5710	(20.4)
-1.5 m	kg	*6610	*6610	*9530	7780	5840	4070			4260	3050	5.54
(-4.9 ft)	lb	*14570	*14570	*21010	17150	12870	8970			9390	6720	(18.2)
-3.0 m	kg			*7420	*7420					*5070	4590	4.24
(-9.8 ft)	lb			*16360	*16360					*11180	10120	(13.9)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	1900	2200	-	500	-	Up	-	-



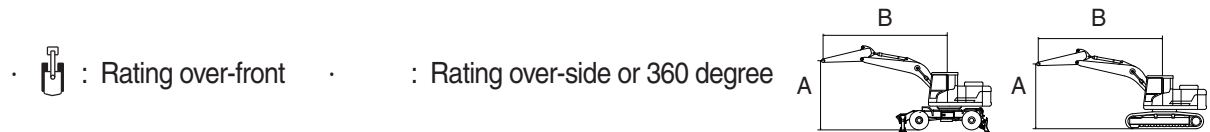
: Rating over-front

: Rating over-side or 360 degree



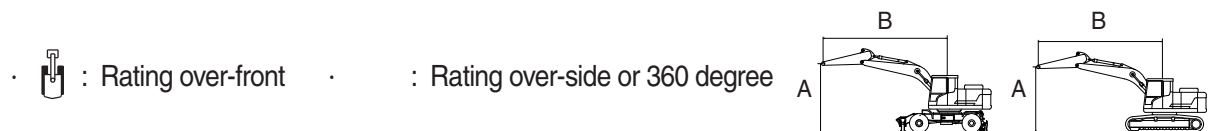
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
6.0 m	kg					*4140	*4140			*3560	*3560	4.95
(19.7 ft)	lb					*9130	*9130			*7850	*7850	(16.2)
4.5 m	kg					*4450	*4450			*3320	2970	5.92
(14.8 ft)	lb					*9810	*9810			*7320	6550	(19.4)
3.0 m	kg					*5400	4390	3910	2850	*3350	2580	6.39
(9.8 ft)	lb					*11900	9680	8620	6280	*7390	5690	(21.0)
1.5 m	kg					5960	4180	3830	2770	3410	2480	6.49
(4.9 ft)	lb					13140	9220	8440	6110	7520	5470	(21.3)
Ground	kg			*6540	*6540	5840	4080	3780	2730	3590	2600	6.22
Line	lb			*14420	*14420	12870	8990	8330	6020	7910	5730	(20.4)
-1.5 m	kg	*6610	*6610	*9530	7800	5840	4080			4260	3060	5.54
(-4.9 ft)	lb	*14570	*14570	*21010	17200	12870	8990			9390	6750	(18.2)
-3.0 m	kg			*7420	*7420					*5070	4600	4.24
(-9.8 ft)	lb			*16360	*16360					*11180	10140	(13.9)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	2100	1700	-	500	-	Down	-	-



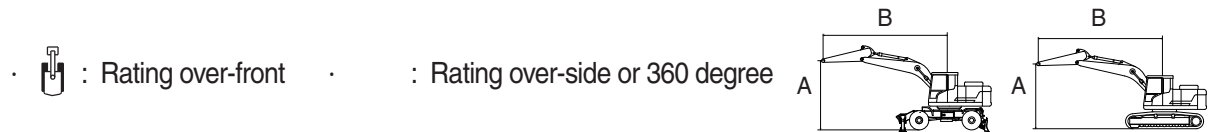
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
6.0 m (19.7 ft)	kg					*3870	*3870			*3400	3390	5.17
	lb					*8530	*8530			*7500	7470	(17.0)
4.5 m (14.8 ft)	kg					*4230	4220	3660	2640	*3200	2560	6.10
	lb					*9330	9300	8070	5820	*7050	5640	(20.0)
3.0 m (9.8 ft)	kg					*5200	4000	3590	2570	3110	2230	6.57
	lb					*11460	8820	7910	5670	6860	4920	(21.5)
1.5 m (4.9 ft)	kg					5470	3780	3500	2490	2990	2130	6.66
	lb					12060	8330	7720	5490	6590	4700	(21.8)
Ground Line	kg			*6800	*6800	5340	3660	3440	2430	3130	2220	6.40
	lb			*14990	*14990	11770	8070	7580	5360	6900	4890	(21.0)
-1.5 m (-4.9 ft)	kg	*6280	*6280	*9720	7000	5320	3640			3680	2600	5.74
	lb	*13850	*13850	*21430	15430	11730	8020			8110	5730	(18.8)
-3.0 m (-9.8 ft)	kg			*7820	7180	*5030	3770			*5020	3770	4.50
	lb			*17240	15830	*11090	8310			*11070	8310	(14.8)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	2100	1700	-	500	-	Up	-	-



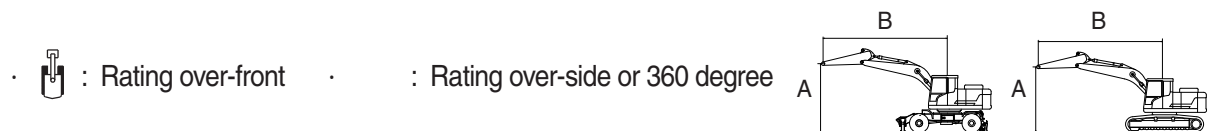
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
6.0 m (19.7 ft)	kg					*3870	*3870			*3400	3400	5.17
	lb					*8530	*8530			*7500	7500	(17.0)
4.5 m (14.8 ft)	kg					*4230	4220	3660	2640	*3200	2560	6.10
	lb					*9330	9300	8070	5820	*7050	5640	(20.0)
3.0 m (9.8 ft)	kg					*5200	4010	3590	2580	3110	2230	6.57
	lb					*11460	8840	7910	5690	6860	4920	(21.5)
1.5 m (4.9 ft)	kg					5470	3790	3500	2490	2990	2140	6.66
	lb					12060	8360	7720	5490	6590	4720	(21.8)
Ground Line	kg			*6800	*6800	5340	3670	3440	2440	3130	2230	6.40
	lb			*14990	*14990	11770	8090	7580	5380	6900	4920	(21.0)
-1.5 m (-4.9 ft)	kg	*6280	*6280	*9720	7020	5320	3650			3680	2600	5.74
	lb	*13850	*13850	*21430	15480	11730	8050			8110	5730	(18.8)
-3.0 m (-9.8 ft)	kg			*7820	7190	*5030	3780			*5020	3770	4.50
	lb			*17240	15850	*11090	8330			*11070	8310	(14.8)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	2100	2200	-	500	-	Down	-	-



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)		Capacity		Reach
												m (ft)
6.0 m (19.7 ft)	kg lb					*3870 *8530	*3870 *8530			*3400 *7500	*3400 *7500	5.17 (17.0)
4.5 m (14.8 ft)	kg lb					*4230 *9330	*4230 *9330	*3740 *8250	2900 6390	*3200 *7050	2820 6220	6.10 (20.0)
3.0 m (9.8 ft)	kg lb					*5200 *11460	4390 9680	3910 8620	2840 6260	*3240 *7140	2470 5450	6.57 (21.5)
1.5 m (4.9 ft)	kg lb					5950 13120	4170 9190	3820 8420	2750 6060	3260 7190	2370 5220	6.66 (21.8)
Ground Line	kg lb			*6800 *14990	*6800 *14990	5820 12830	4050 8930	3760 8290	2700 5950	3420 7540	2470 5450	6.40 (21.0)
-1.5 m (-4.9 ft)	kg lb	*6280 *13850	*6280 *13850	*9720 *21430	7720 17020	5800 12790	4030 8880			4020 8860	2880 6350	5.74 (18.8)
-3.0 m (-9.8 ft)	kg lb			*7820 *17240	*7820 *17240	*5030 *11090	4160 9170			*5020 *11070	4150 9150	4.50 (14.8)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	2100	2200	-	500	-	Up	-	-



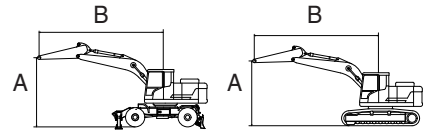
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
6.0 m (19.7 ft)	kg lb					*3870 *8530	*3870 *8530			*3400 *7500	*3400 *7500	5.17 (17.0)
4.5 m (14.8 ft)	kg lb					*4230 *9330	*4230 *9330	*3740 *8250	2910 6420	*3200 *7050	2820 6220	6.10 (20.0)
3.0 m (9.8 ft)	kg lb					*5200 *11460	4390 9680	3910 8620	2840 6260	*3240 *7140	2470 5450	6.57 (21.5)
1.5 m (4.9 ft)	kg lb					5950 13120	4180 9220	3820 8420	2760 6080	3260 7190	2370 5220	6.66 (21.8)
Ground Line	kg lb			*6800 *14990	*6800 *14990	5820 12830	4050 8930	3760 8290	2700 5950	3420 7540	2470 5450	6.40 (21.0)
-1.5 m (-4.9 ft)	kg lb	*6280 *13850	*6280 *13850	*9720 *21430	7740 17060	5800 12790	4040 8910			4020 8860	2880 6350	5.74 (18.8)
-3.0 m (-9.8 ft)	kg lb			*7820 *17240	*7820 *17240	*5030 *11090	4170 9190			*5020 *11070	4160 9170	4.50 (14.8)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	2500	1700	-	500	-	Down	-	-



: Rating over-front

: Rating over-side or 360 degree



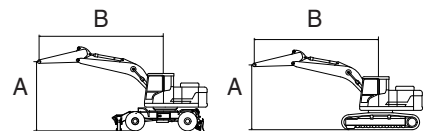
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
6.0 m (19.7 ft)	kg lb					*3390 *7470	*3390 *7470			*2350 *5180	*2350 *5180	5.69 (18.7)
4.5 m (14.8 ft)	kg lb					*3820 *8420	*3820 *8420	3690 8140	2660 5860	*2200 *4850	*2200 *4850	6.54 (21.5)
3.0 m (9.8 ft)	kg lb			*6900 *15210	*6900 *15210	*4820 *10630	4030 8880	3600 7940	2580 5690	*2210 *4870	2020 4450	6.98 (22.9)
1.5 m (4.9 ft)	kg lb			*6400 *14110	*6400 *14110	5490 12100	3790 8360	3490 7690	2480 5470	*2350 *5180	1930 4250	7.06 (23.2)
Ground Line	kg lb			*6930 *15280	6900 15210	5310 11710	3630 8000	3410 7520	2400 5290	*2660 *5860	2000 4410	6.82 (22.4)
-1.5 m (-4.9 ft)	kg lb	*5450 *12020	*5450 *12020	*10010 *22070	6900 15210	5260 11600	3590 7910	3400 7500	2390 5270	3240 7140	2290 5050	6.21 (20.4)
-3.0 m (-9.8 ft)	kg lb	*9870 *21760	*9870 *21760	*8500 *18740	7040 15520	5350 11790	3670 8090			4430 9770	3090 6810	5.09 (16.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	2500	1700	-	500	-	Up	-	-



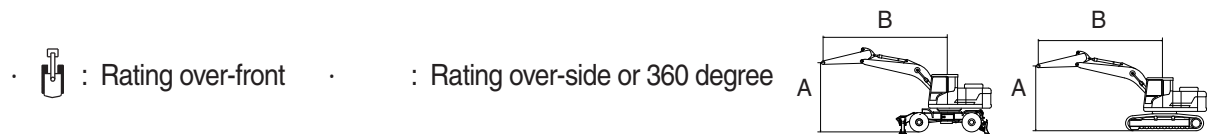
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: Rating over-side or 360 degree



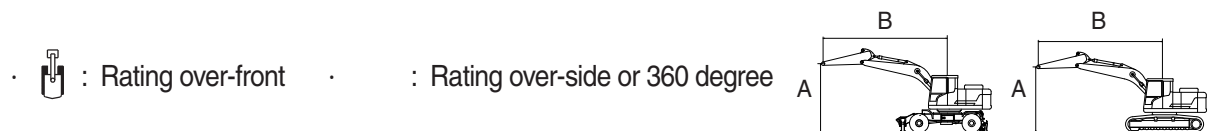
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
6.0 m (19.7 ft)	kg lb					*3390 *7470	*3390 *7470			*2350 *5180	*2350 *5180	5.69 (18.7)
4.5 m (14.8 ft)	kg lb					*3820 *8420	*3820 *8420	3690 8140	2660 5860	*2200 *4850	*2200 *4850	6.54 (21.5)
3.0 m (9.8 ft)	kg lb			*6900 *15210	*6900 *15210	*4820 *10630	4040 8910	3600 7940	2580 5690	*2210 *4870	2020 4450	6.98 (22.9)
1.5 m (4.9 ft)	kg lb			*6400 *14110	*6400 *14110	5490 12100	3800 8380	3490 7690	2480 5470	*2350 *5180	1940 4280	7.06 (23.2)
Ground Line	kg lb			*6930 *15280	6920 15260	5310 11710	3640 8020	3410 7520	2410 5310	*2660 *5860	2010 4430	6.82 (22.4)
-1.5 m (-4.9 ft)	kg lb	*5450 *12020	*5450 *12020	*10010 *22070	6920 15260	5260 11600	3600 7940	3400 7500	2400 5290	3240 7140	2290 5050	6.21 (20.4)
-3.0 m (-9.8 ft)	kg lb	*9870 *21760	*9870 *21760	*8500 *18740	7060 15560	5350 11790	3670 8090			4430 9770	3100 6830	5.09 (16.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	2500	2200	-	500	-	Down	-	-



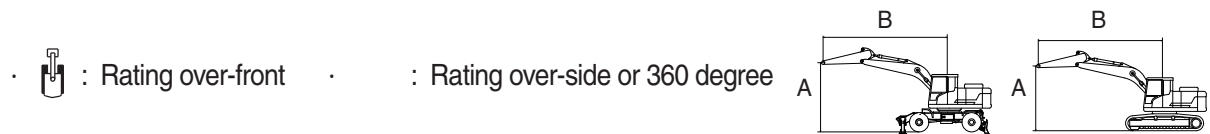
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
6.0 m (19.7 ft)	kg lb					*3390 *7470	*3390 *7470			*2350 *5180	*2350 *5180	5.69 (18.7)
4.5 m (14.8 ft)	kg lb					*3820 *8420	*3820 *8420	*3690 *8140	2920 6440	*2200 *4850	*2200 *4850	6.54 (21.5)
3.0 m (9.8 ft)	kg lb			*6900 *15210	*6900 *15210	*4820 *10630	4420 9740	3920 8640	2840 6260	*2210 *4870	*2210 *4870	6.98 (22.9)
1.5 m (4.9 ft)	kg lb			*6400 *14110	*6400 *14110	*5920 *13050	4170 9190	3810 8400	2740 6040	*2350 *5180	2150 4740	7.06 (23.2)
Ground Line	kg lb			*6930 *15280	*6930 *15280	5790 12760	4020 8860	3730 8220	2670 5890	*2660 *5860	2230 4920	6.82 (22.4)
-1.5 m (-4.9 ft)	kg lb	*5450 *12020	*5450 *12020	*10010 *22070	7620 16800	5740 12650	3980 8770	3720 8200	2660 5860	*3300 *7280	2540 5600	6.21 (20.4)
-3.0 m (-9.8 ft)	kg lb	*9870 *21760	*9870 *21760	*8500 *18740	7760 17110	*5670 *12500	4050 8930			*4700 *10360	3420 7540	5.09 (16.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	2500	2200	-	500	-	Up	-	-



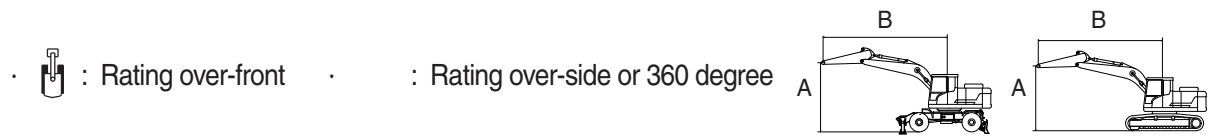
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
6.0 m (19.7 ft)	kg lb					*3390 *7470	*3390 *7470			*2350 *5180	*2350 *5180	5.69 (18.7)
4.5 m (14.8 ft)	kg lb					*3820 *8420	*3820 *8420	*3690 *8140	2930 6460	*2200 *4850	*2200 *4850	6.54 (21.5)
3.0 m (9.8 ft)	kg lb			*6900 *15210	*6900 *15210	*4820 *10630	4430 9770	3920 8640	2850 6280	*2210 *4870	*2210 *4870	6.98 (22.9)
1.5 m (4.9 ft)	kg lb			*6400 *14110	*6400 *14110	*5920 *13050	4180 9220	3810 8400	2750 6060	*2350 *5180	2150 4740	7.06 (23.2)
Ground Line	kg lb			*6930 *15280	*6930 *15280	5790 12760	4030 8880	3730 8220	2670 5890	*2660 *5860	2230 4920	6.82 (22.4)
-1.5 m (-4.9 ft)	kg lb	*5450 *12020	*5450 *12020	*10010 *22070	7640 16840	5740 12650	3990 8800	3720 8200	2660 5860	*3300 *7280	2550 5620	6.21 (20.4)
-3.0 m (-9.8 ft)	kg lb	*9870 *21760	*9870 *21760	*8500 *18740	7780 17150	*5670 *12500	4060 8950			*4700 *10360	3430 7560	5.09 (16.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	3000	1700	-	500	-	Down	-	-



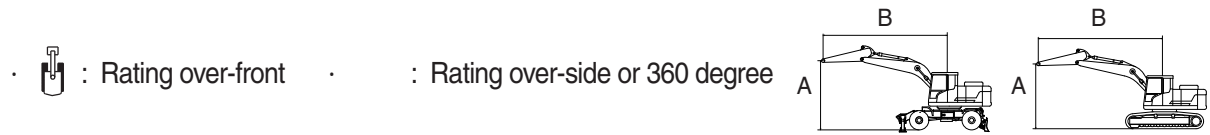
Lift-point height (A)		Lift-point radius (B)										At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
														m (ft)
7.5 m (24.6 ft)	kg											*2290	*2290	4.89
	lb											*5050	*5050	(16.0)
6.0 m (19.7 ft)	kg							*2550	*2550			*1970	*1970	6.25
	lb							*5620	*5620			*4340	*4340	(20.5)
4.5 m (14.8 ft)	kg							*3330	2700			*1870	*1870	7.04
	lb							*7340	5950			*4120	*4120	(23.1)
3.0 m (9.8 ft)	kg			*5760	*5760	*4320	4100	3630	2600			*1880	1820	7.44
	lb			*12700	*12700	*9520	9040	8000	5730			*4140	4010	(24.4)
1.5 m (4.9 ft)	kg			*8800	7300	*5540	3830	3500	2480	*2110	1760	*1990	1750	7.52
	lb			*19400	16090	*12210	8440	7720	5470	*4650	3880	*4390	3860	(24.7)
Ground Line	kg			*7320	6920	5320	3640	3400	2390			*2230	1800	7.30
	lb			*16140	15260	11730	8020	7500	5270			*4920	3970	(23.9)
-1.5 m (-4.9 ft)	kg	*4810	*4810	*9880	6840	5240	3560	3360	2350			*2710	2010	6.73
	lb	*10600	*10600	*21780	15080	11550	7850	7410	5180			*5970	4430	(22.1)
-3.0 m (-9.8 ft)	kg	*8180	*8180	*9190	6940	5270	3590					3670	2570	5.71
	lb	*18030	*18030	*20260	15300	11620	7910					8090	5670	(18.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	3000	1700	-	500	-	Up	-	-



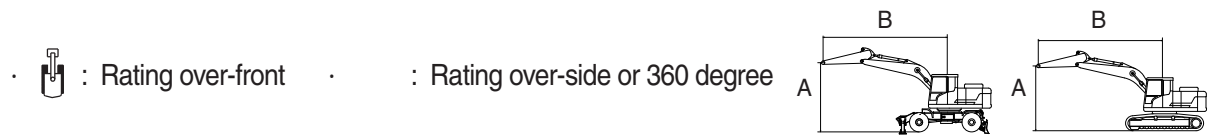
Lift-point height (A)		Lift-point radius (B)										At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
														m (ft)
7.5 m (24.6 ft)	kg											*2290	*2290	4.89
	lb											*5050	*5050	(16.0)
6.0 m (19.7 ft)	kg							*2550	*2550			*1970	*1970	6.25
	lb							*5620	*5620			*4340	*4340	(20.5)
4.5 m (14.8 ft)	kg							*3330	2700			*1870	*1870	7.04
	lb							*7340	5950			*4120	*4120	(23.1)
3.0 m (9.8 ft)	kg			*5760	*5760	*4320	4110	3630	2610			*1880	1820	7.44
	lb			*12700	*12700	*9520	9060	8000	5750			*4140	4010	(24.4)
1.5 m (4.9 ft)	kg			*8800	7320	*5540	3840	3500	2490	*2110	1760	*1990	1750	7.52
	lb			*19400	16140	*12210	8470	7720	5490	*4650	3880	*4390	3860	(24.7)
Ground Line	kg			*7320	6940	5320	3650	3400	2400			*2230	1800	7.30
	lb			*16140	15300	11730	8050	7500	5290			*4920	3970	(23.9)
-1.5 m (-4.9 ft)	kg	*4810	*4810	*9880	6860	5240	3570	3360	2360			*2710	2020	6.73
	lb	*10600	*10600	*21780	15120	11550	7870	7410	5200			*5970	4450	(22.1)
-3.0 m (-9.8 ft)	kg	*8180	*8180	*9190	6950	5270	3600					3670	2570	5.71
	lb	*18030	*18030	*20260	15320	11620	7940					8090	5670	(18.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	3000	2200	-	500	-	Down	-	-



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											*2290	*2290	4.89
	lb											*5050	*5050	(16.0)
6.0 m (19.7 ft)	kg							*2550	*2550			*1970	*1970	6.25
	lb							*5620	*5620			*4340	*4340	(20.5)
4.5 m (14.8 ft)	kg							*3330	2960			*1870	*1870	7.04
	lb							*7340	6530			*4120	*4120	(23.1)
3.0 m (9.8 ft)	kg			*5760	*5760	*4320	*4320	*3760	2870			*1880	*1880	7.44
	lb			*12700	*12700	*9520	*9520	*8290	6330			*4140	*4140	(24.4)
1.5 m (4.9 ft)	kg			*8800	8020	*5540	4220	3820	2750	*2110	1960	*1990	1950	7.52
	lb			*19400	17680	*12210	9300	8420	6060	*4650	4320	*4390	4300	(24.7)
Ground Line	kg			*7320	*7320	5800	4030	3720	2660			*2230	2010	7.30
	lb			*16140	*16140	12790	8880	8200	5860			*4920	4430	(23.9)
-1.5 m (-4.9 ft)	kg	*4810	*4810	*9880	7560	5720	3950	3680	2620			*2710	2240	6.73
	lb	*10600	*10600	*21780	16670	12610	8710	8110	5780			*5970	4940	(22.1)
-3.0 m (-9.8 ft)	kg	*8180	*8180	*9190	7650	5750	3980					*3820	2850	5.71
	lb	*18030	*18030	*20260	16870	12680	8770					*8420	6280	(18.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		4600	3000	2200	-	500	-	Up	-	-



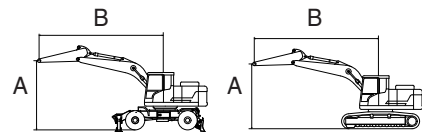
Lift-point height (A)		Lift-point radius (B)										At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
														m (ft)
7.5 m (24.6 ft)	kg lb											*2290 *5050	*2290 *5050	4.89 (16.0)
6.0 m (19.7 ft)	kg lb							*2550 *5620	*2550 *5620			*1970 *4340	*1970 *4340	6.25 (20.5)
4.5 m (14.8 ft)	kg lb							*3330 *7340	2970 6550			*1870 *4120	*1870 *4120	7.04 (23.1)
3.0 m (9.8 ft)	kg lb			*5760 *12700	*5760 *12700	*4320 *9520	*4320 *9520	*3760 *8290	2870 6330			*1880 *4140	*1880 *4140	7.44 (24.4)
1.5 m (4.9 ft)	kg lb			*8800 *19400	8040 17730	*5540 *12210	4230 9330	3820 8420	2750 6060	*2110 *4650	1960 4320	*1990 *4390	1950 4300	7.52 (24.7)
Ground Line	kg lb			*7320 *16140	*7320 *16140	5800 12790	4040 8910	3720 8200	2660 5860			*2230 *4920	2010 4430	7.30 (23.9)
-1.5 m (-4.9 ft)	kg lb	*4810 *10600	*4810 *10600	*9880 *21780	7580 16710	5720 12610	3960 8730	3680 8110	2620 5780			*2710 *5970	2250 4960	6.73 (22.1)
-3.0 m (-9.8 ft)	kg lb	*8180 *18030	*8180 *18030	*9190 *20260	7670 16910	5750 12680	3990 8800					*3820 *8420	2860 6310	5.71 (18.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	1900	1700	-	500	-	Down	-	-



: Rating over-front

: Rating over-side or 360 degree



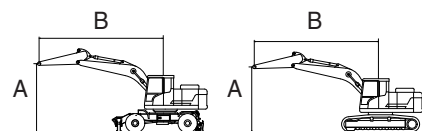
Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
										m (ft)
7.5 m (24.6 ft)	kg lb							*4580 *10100	*4580 *10100	3.81 (12.5)
6.0 m (19.7 ft)	kg lb			*4060 *8950	*4060 *8950			*4260 *9390	3100 6830	5.46 (17.9)
4.5 m (14.8 ft)	kg lb	*5850 *12900	*5850 *12900	*4620 *10190	4200 9260	3680 8110	2640 5820	3340 7360	2390 5270	6.35 (20.8)
3.0 m (9.8 ft)	kg lb			5680 12520	3940 8690	3590 7910	2560 5640	2950 6500	2100 4630	6.79 (22.3)
1.5 m (4.9 ft)	kg lb			5420 11950	3710 8180	3490 7690	2460 5420	2840 6260	2010 4430	6.88 (22.6)
Ground Line	kg lb			5300 11680	3600 7940	3420 7540	2400 5290	2970 6550	2100 4630	6.63 (21.8)
-1.5 m (-4.9 ft)	kg lb	*10350 *22820	6950 15320	5300 11680	3600 7940	3450 7610	2420 5340	3450 7610	2420 5340	6.00 (19.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	1900	1700	-	500	-	Up	-	-



: Rating over-front

: Rating over-side or 360 degree



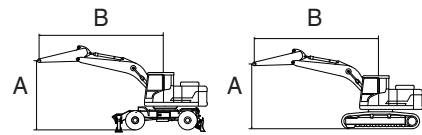
Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
										m (ft)
7.5 m (24.6 ft)	kg lb							*4580 *10100	*4580 *10100	3.81 (12.5)
6.0 m (19.7 ft)	kg lb			*4060 *8950	*4060 *8950			*4260 *9390	3110 6860	5.46 (17.9)
4.5 m (14.8 ft)	kg lb	*5850 *12900	*5850 *12900	*4620 *10190	4210 9280	3680 8110	2640 5820	3340 7360	2390 5270	6.35 (20.8)
3.0 m (9.8 ft)	kg lb			5680 12520	3940 8690	3590 7910	2560 5640	2950 6500	2100 4630	6.79 (22.3)
1.5 m (4.9 ft)	kg lb			5420 11950	3710 8180	3490 7690	2460 5420	2840 6260	2020 4450	6.88 (22.6)
Ground Line	kg lb			5300 11680	3610 7960	3420 7540	2410 5310	2970 6550	2100 4630	6.63 (21.8)
-1.5 m (-4.9 ft)	kg lb	*10350 *22820	6970 15370	5300 11680	3610 7960	3450 7610	2430 5360	3450 7610	2430 5360	6.00 (19.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	1900	2200	-	500	-	Down	-	-



: Rating over-front

: Rating over-side or 360 degree



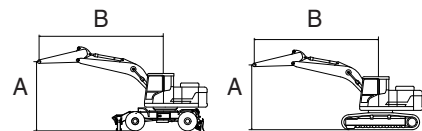
Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
										m (ft)
7.5 m (24.6 ft)	kg lb							*4580 *10100	*4580 *10100	3.81 (12.5)
6.0 m (19.7 ft)	kg lb			*4060 *8950	*4060 *8950			*4260 *9390	3400 7500	5.46 (17.9)
4.5 m (14.8 ft)	kg lb	*5850 *12900	*5850 *12900	*4620 *10190	4580 10100	4000 8820	2900 6390	3630 8000	2640 5820	6.35 (20.8)
3.0 m (9.8 ft)	kg lb			*5740 *12650	4320 9520	3910 8620	2820 6220	3210 7080	2320 5110	6.79 (22.3)
1.5 m (4.9 ft)	kg lb			5900 13010	4090 9020	3800 8380	2720 6000	3100 6830	2230 4920	6.88 (22.6)
Ground Line	kg lb			5780 12740	3990 8800	3740 8250	2670 5890	3250 7170	2330 5140	6.63 (21.8)
-1.5 m (-4.9 ft)	kg lb	*10350 *22820	7670 16910	5780 12740	3990 8800	3770 8310	2690 5930	3770 8310	2690 5930	6.00 (19.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	1900	2200	-	500	-	Up	-	-



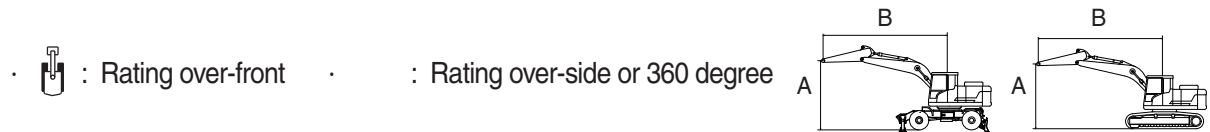
: Rating over-front

: Rating over-side or 360 degree



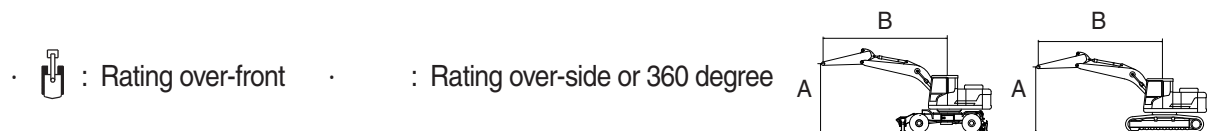
Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
										m (ft)
7.5 m (24.6 ft)	kg lb							*4580 *10100	*4580 *10100	3.81 (12.5)
6.0 m (19.7 ft)	kg lb			*4060 *8950	*4060 *8950			*4260 *9390	3410 7520	5.46 (17.9)
4.5 m (14.8 ft)	kg lb	*5850 *12900	*5850 *12900	*4620 *10190	4590 10120	4000 8820	2910 6420	3630 8000	2640 5820	6.35 (20.8)
3.0 m (9.8 ft)	kg lb			*5740 *12650	4330 9550	3910 8620	2830 6240	3210 7080	2330 5140	6.79 (22.3)
1.5 m (4.9 ft)	kg lb			5900 13010	4100 9040	3800 8380	2730 6020	3100 6830	2240 4940	6.88 (22.6)
Ground Line	kg lb			5780 12740	3990 8800	3740 8250	2670 5890	3250 7170	2330 5140	6.63 (21.8)
-1.5 m (-4.9 ft)	kg lb	*10350 *22820	7690 16950	5780 12740	4000 8820	3770 8310	2690 5930	3770 8310	2690 5930	6.00 (19.7)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	2100	1700	-	500	-	Down	-	-



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)		Capacity		Reach
										m (ft)
7.5 m (24.6 ft)	kg lb							*4290 *9460	*4290 *9460	4.13 (13.6)
6.0 m (19.7 ft)	kg lb			*3820 *8420	*3820 *8420			*4060 *8950	2910 6420	5.68 (18.6)
4.5 m (14.8 ft)	kg lb	*5410 *11930	*5410 *11930	*4400 *9700	4210 9280	3690 8140	2640 5820	3180 7010	2270 5000	6.54 (21.5)
3.0 m (9.8 ft)	kg lb			*5540 *12210	3950 8710	3590 7910	2550 5620	2820 6220	2000 4410	6.97 (22.9)
1.5 m (4.9 ft)	kg lb			5420 11950	3700 8160	3480 7670	2440 5380	2720 6000	1920 4230	7.06 (23.2)
Ground Line	kg lb			5270 11620	3570 7870	3400 7500	2380 5250	2830 6240	1990 4390	6.82 (22.4)
-1.5 m (-4.9 ft)	kg lb	*10390 *22910	6880 15170	5260 11600	3560 7850	3410 7520	2380 5250	3260 7190	2280 5030	6.21 (20.4)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	2100	1700	-	500	-	Up	-	-



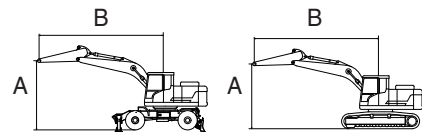
Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
										m (ft)
7.5 m (24.6 ft)	kg lb							*4290 *9460	*4290 *9460	4.13 (13.6)
6.0 m (19.7 ft)	kg lb			*3820 *8420	*3820 *8420			*4060 *8950	2920 6440	5.68 (18.6)
4.5 m (14.8 ft)	kg lb	*5410 *11930	*5410 *11930	*4400 *9700	4220 9300	3690 8140	2650 5840	3180 7010	2280 5030	6.54 (21.5)
3.0 m (9.8 ft)	kg lb			*5540 *12210	3950 8710	3590 7910	2560 5640	2820 6220	2010 4430	6.97 (22.9)
1.5 m (4.9 ft)	kg lb			5420 11950	3710 8180	3480 7670	2450 5400	2720 6000	1930 4250	7.06 (23.2)
Ground Line	kg lb			5270 11620	3580 7890	3400 7500	2380 5250	2830 6240	2000 4410	6.82 (22.4)
-1.5 m (-4.9 ft)	kg lb	*10390 *22910	6900 15210	5260 11600	3570 7870	3410 7520	2390 5270	3260 7190	2290 5050	6.21 (20.4)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	2100	2200	-	500	-	Down	-	-



: Rating over-front

: Rating over-side or 360 degree



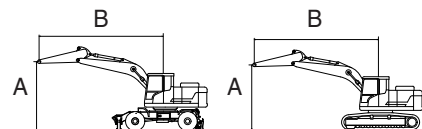
Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
										m (ft)
7.5 m (24.6 ft)	kg lb							*4290 *9460	*4290 *9460	4.13 (13.6)
6.0 m (19.7 ft)	kg lb			*3820 *8420	*3820 *8420			*4060 *8950	3190 7030	5.68 (18.6)
4.5 m (14.8 ft)	kg lb	*5410 *11930	*5410 *11930	*4400 *9700	*4400 *9700	4010 8840	2910 6420	3460 7630	2510 5530	6.54 (21.5)
3.0 m (9.8 ft)	kg lb			*5540 *12210	4330 9550	3910 8620	2820 6220	3080 6790	2220 4890	6.97 (22.9)
1.5 m (4.9 ft)	kg lb			5890 12990	4090 9020	3790 8360	2710 5970	2970 6550	2140 4720	7.06 (23.2)
Ground Line	kg lb			5750 12680	3960 8730	3720 8200	2640 5820	3100 6830	2220 4890	6.82 (22.4)
-1.5 m (-4.9 ft)	kg lb	*10390 *22910	7600 16760	5740 12650	3950 8710	3720 8200	2650 5840	3560 7850	2540 5600	6.21 (20.4)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	2100	2200	-	500	-	Up	-	-



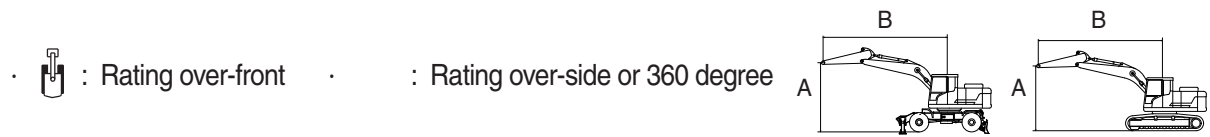
: Rating over-front

: Rating over-side or 360 degree



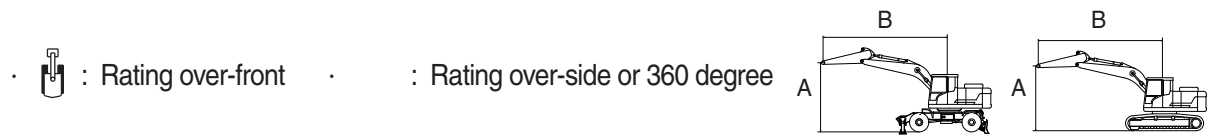
Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
										m (ft)
7.5 m (24.6 ft)	kg lb							*4290 *9460	*4290 *9460	4.13 (13.6)
6.0 m (19.7 ft)	kg lb			*3820 *8420	*3820 *8420			*4060 *8950	3200 7050	5.68 (18.6)
4.5 m (14.8 ft)	kg lb	*5410 *11930	*5410 *11930	*4400 *9700	*4400 *9700	4010 8840	2910 6420	3460 7630	2520 5560	6.54 (21.5)
3.0 m (9.8 ft)	kg lb			*5540 *12210	4340 9570	3910 8620	2820 6220	3080 6790	2230 4920	6.97 (22.9)
1.5 m (4.9 ft)	kg lb			5890 12990	4100 9040	3790 8360	2720 6000	2970 6550	2140 4720	7.06 (23.2)
Ground Line	kg lb			5750 12680	3970 8750	3720 8200	2650 5840	3100 6830	2220 4890	6.82 (22.4)
-1.5 m (-4.9 ft)	kg lb	*10390 *22910	7620 16800	5740 12650	3960 8730	3720 8200	2650 5840	3560 7850	2540 5600	6.21 (20.4)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	2500	1700	-	500	-	Down	-	-



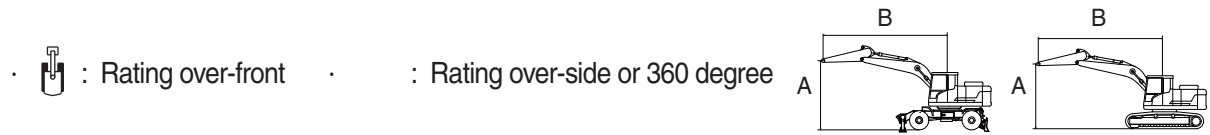
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
												m (ft)
7.5 m (24.6 ft)	kg lb			*3680 *8110	*3680 *8110					*3350 *7390	*3350 *7390	4.80 (15.8)
6.0 m (19.7 ft)	kg lb			*3370 *7430	*3370 *7430	*3610 *7960	2690 5930			*2840 *6260	2540 5600	6.18 (20.3)
4.5 m (14.8 ft)	kg lb			*3980 *8770	*3980 *8770	3720 8200	2660 5860			*2660 *5860	2040 4500	6.98 (22.9)
3.0 m (9.8 ft)	kg lb			*5130 *11310	3990 8800	3600 7940	2560 5640			2570 5670	1820 4010	7.39 (24.2)
1.5 m (4.9 ft)	kg lb			5430 11970	3710 8180	3470 7650	2430 5360			2480 5470	1750 3860	7.47 (24.5)
Ground Line	kg lb	*4990 *11000	*4990 *11000	5250 11570	3550 7830	3370 7430	2350 5180			2570 5670	1800 3970	7.24 (23.8)
-1.5 m (-4.9 ft)	kg lb	*9190 *20260	6760 14900	5200 11460	3510 7740	3350 7390	2330 5140			2900 6390	2030 4480	6.67 (21.9)
-3.0 m (-9.8 ft)	kg lb			5280 11640	3580 7890							

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	2500	1700	-	500	-	Up	-	-



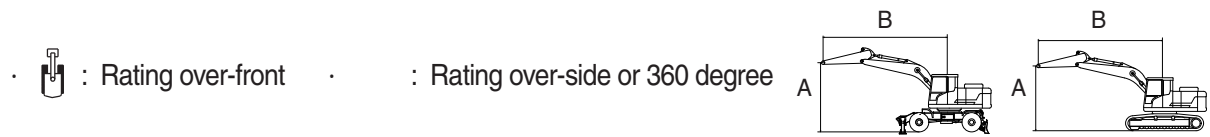
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
												m (ft)
7.5 m (24.6 ft)	kg lb			*3680 *8110	*3680 *8110					*3350 *7390	*3350 *7390	4.80 (15.8)
6.0 m (19.7 ft)	kg lb			*3370 *7430	*3370 *7430	*3610 *7960	2700 5950			*2840 *6260	2540 5600	6.18 (20.3)
4.5 m (14.8 ft)	kg lb			*3980 *8770	*3980 *8770	3720 8200	2670 5890			*2660 *5860	2040 4500	6.98 (22.9)
3.0 m (9.8 ft)	kg lb			*5130 *11310	3990 8800	3600 7940	2560 5640			2570 5670	1820 4010	7.39 (24.2)
1.5 m (4.9 ft)	kg lb			5430 11970	3720 8200	3470 7650	2440 5380			2480 5470	1750 3860	7.47 (24.5)
Ground Line	kg lb	*4990 *11000	*4990 *11000	5250 11570	3550 7830	3370 7430	2350 5180			2570 5670	1810 3990	7.24 (23.8)
-1.5 m (-4.9 ft)	kg lb	*9190 *20260	6780 14950	5200 11460	3510 7740	3350 7390	2330 5140			2900 6390	2030 4480	6.67 (21.9)
-3.0 m (-9.8 ft)	kg lb			5280 11640	3580 7890							

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	2500	2200	-	500	-	Down	-	-



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	kg			*3680	*3680					*3350	*3350	4.80
(24.6 ft)	lb			*8110	*8110					*7390	*7390	(15.8)
6.0 m	kg			*3370	*3370	*3610	2960			*2840	2790	6.18
(19.7 ft)	lb			*7430	*7430	*7960	6530			*6260	6150	(20.3)
4.5 m	kg			*3980	*3980	*3760	2930			*2660	2260	6.98
(14.8 ft)	lb			*8770	*8770	*8290	6460			*5860	4980	(22.9)
3.0 m	kg			*5130	4370	3910	2820			*2650	2020	7.39
(9.8 ft)	lb			*11310	9630	8620	6220			*5840	4450	(24.2)
1.5 m	kg			5910	4100	3780	2700			2720	1950	7.47
(4.9 ft)	lb			13030	9040	8330	5950			6000	4300	(24.5)
Ground	kg	*4990	*4990	5730	3930	3690	2610			2820	2010	7.24
Line	lb	*11000	*11000	12630	8660	8140	5750			6220	4430	(23.8)
-1.5 m	kg	*9190	7480	5680	3890	3670	2590			3170	2260	6.67
(-4.9 ft)	lb	*20260	16490	12520	8580	8090	5710			6990	4980	(21.9)
-3.0 m	kg			5760	3960							
(-9.8 ft)	lb			12700	8730							

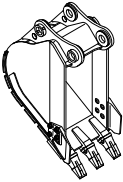
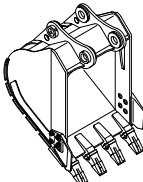
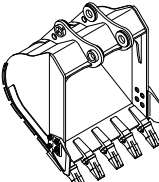
Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	2500	2200	-	500	-	Up	-	-



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	kg			*3680	*3680					*3350	*3350	4.80
(24.6 ft)	lb			*8110	*8110					*7390	*7390	(15.8)
6.0 m	kg			*3370	*3370	*3610	2960			*2840	2800	6.18
(19.7 ft)	lb			*7430	*7430	*7960	6530			*6260	6170	(20.3)
4.5 m	kg			*3980	*3980	*3760	2940			*2660	2260	6.98
(14.8 ft)	lb			*8770	*8770	*8290	6480			*5860	4980	(22.9)
3.0 m	kg			*5130	4380	3910	2830			*2650	2030	7.39
(9.8 ft)	lb			*11310	9660	8620	6240			*5840	4480	(24.2)
1.5 m	kg			5910	4100	3780	2700			2720	1950	7.47
(4.9 ft)	lb			13030	9040	8330	5950			6000	4300	(24.5)
Ground Line	kg	*4990	*4990	5730	3940	3690	2620			2820	2020	7.24
	lb	*11000	*11000	12630	8690	8140	5780			6220	4450	(23.8)
-1.5 m	kg	*9190	7500	5680	3900	3670	2600			3170	2270	6.67
(-4.9 ft)	lb	*20260	16530	12520	8600	8090	5730			6990	5000	(21.9)
-3.0 m	kg			5760	3970							
(-9.8 ft)	lb			12700	8750							

6. BUCKET SELECTION GUIDE

1) GENERAL BUCKET

		
0.23 m³ SAE heaped bucket	0.40, 0.46 m³ SAE heaped bucket	0.52, ※0.58, 0.65, 0.71 m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation						
					4.6 m (15' 1") Mono boom				4.9 m (16' 9") Adjust boom		
SAE heaped	CECE heaped	Without side cutter	With side cutter		1.9 m arm (6' 3")	2.1 m arm (6' 11")	2.5 m arm (8' 2")	3.0 m arm (9' 10")	1.9 m arm (6' 3")	2.1 m arm (6' 11")	2.5 m arm (8' 2")
0.23 m³ (0.30 yd³)	0.20 m³ (0.26 yd³)	520 mm (20.5")	620 mm (24.4")	335 kg (740 lb)	○	○	○	○	○	○	○
0.40 m³ (0.52 yd³)	0.35 m³ (0.46 yd³)	760 mm (29.9")	860 mm (33.9")	410 kg (900 lb)	○	○	○	○	○	○	○
0.46 m³ (0.60 yd³)	0.40 m³ (0.52 yd³)	850 mm (33.5")	950 mm (37.4")	435 kg (960 lb)	○	○	◐	●	○	○	◐
0.52 m³ (0.68 yd³)	0.45 m³ (0.59 yd³)	935 mm (36.8")	1035 mm (40.7")	460 kg (1010 lb)	○	◐	◐		○	◐	◐
※0.58 m³ (0.76 yd³)	0.50 m³ (0.65 yd³)	1030 mm (40.6")	1130 mm (44.5")	480 kg (1060 lb)	○	◐	●		◐	●	●
0.65 m³ (0.85 yd³)	0.55 m³ (0.72 yd³)	1110 mm (43.7")	1210 mm (47.6")	500 kg (1100 lb)	◐	●			●	●	
0.71 m³ (0.93 yd³)	0.60 m³ (0.78 yd³)	1205 mm (47.4")	1305 mm (51.4")	540 kg (1190 lb)	●	●			●		

※ : Standard 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

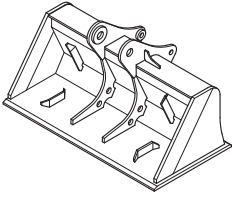
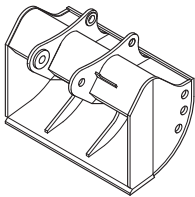
※ These recommendations are for general conditions and average use.

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.

2) Special bucket

Slope finishing bucket 	Ditch cleaning bucket 
◎ 0.55 m³ SAE heaped bucket	★ 0.45 m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation					
					4.6 m (15' 1") Mono boom			4.9 m (16' 9") Adjust boom		
SAE heaped	CECE heaped	Without side cutter	With side cutter		1.9 m arm (6' 3")	2.1 m arm (6' 11")	2.5 m arm (8' 2")	1.9 m arm (6' 3")	2.1 m arm (6' 11")	2.5 m arm (8' 2")
◎ 0.55 m³ (0.72 yd³)	0.45 m³ (0.59 yd³)	1800 mm (70.9")	-	585 kg (1290 lb)	◎	●	●	◎	●	●
★ 0.45 m³ (0.59 yd³)	0.40 m³ (0.52 yd³)	1520 mm (59.8")	-	410 kg (900 lb)	○	○	◎	◎	◎	●

◎ : Slope finishing bucket

★ : Ditch cleaning 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

7. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSB 6.7
Type	4-cycle turbocharged diesel engine, low emission
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	107 × 124 mm (4.2" × 4.9")
Piston displacement	6700 cc (409 cu in)
Compression ratio	17.3 : 1
Rated net horse power (SAE J1349)	149 Hp (111 kW) at 2150 rpm
Rated gross horse power (SAE J1995)	157 Hp (117 kW) at 2150 rpm
Maximum torque	68.6 kgf · m (496 lbf · ft) at 1500 rpm
Engine oil quantity	23.7 ℓ (6.3 U.S. gal)
Dry weight	520 kg (1145 lb)
High idling speed	2100 ± 50 rpm
Low idling speed	850 ± 100 rpm
Rated fuel consumption	171.5 g/Hp · hr at 2150 rpm
Starting motor	Nippon denso (24 V - 4.8 kW)
Alternator	Denso (24 V - 95 A)
Battery	2 × 12 V × 100 Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 27.5 cc/rev
Maximum pressure	350 kgf/cm ² (4980 psi) [380 kgf/cm ² (5400 psi)]
Rated oil flow	2 × 172 ℓ /min (45.4 U.S. gpm / 37.0 U.K. gpm)
Rated speed	2100 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	32.3 ℓ /min (8.5 U.S. gpm/7.1 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	11 spools two-block
Operating method	Hydraulic pilot system
Main relief valve pressure	350 kgf/cm ² (4980 psi) [380 kgf/cm ² (5400 psi)]
Overload relief valve pressure	400 kgf/cm ² (5690 psi)

[]: Power boost

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	71 cc/rev
Relief pressure	285 kgf/cm ² (4054 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	30 kgf · m (217 lbf · ft)
Brake release pressure	15~50 kgf/cm ² (213~711 psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement bent-axis axial piston motor
Relief pressure	380 kgf/cm ² (5400 psi)
Counter balance valve	Applied
Capacity (max/min)	107/40 cc/rev

7) POWER TRAIN

Item	Description		Specification
Transmission	Type		2 speed power shift transmission
	Gear ratio	1st	4.87
		2nd	1.20
	Clutch pressure		30~32 kgf /cm ² (427~455 psi)
Parking brake	Type		Multi disc brake integrated in transmission
	Maximum braking torque		2124 kgf · m (15360 lbf · ft)
Axle	Type		4 wheel drive with differential
	Gear ratio		16.0
	Brake		Multi disc brake
	Brake pressure		60 kgf /cm ² (850 psi)
	Steering pressure		180 kgf /cm ² (2560 psi)

8) POWER TRAIN GEAR PUMP

Item	Description
Type	Fixed displacement gear pump (tanedn)
Capacity	Steering + brake : 16.6 + 8.2 cc / rev (pump PTO) [22.4] + 8.2 cc / rev (pump PTO)
Rated flow	Steering + brake : 26.6 + 13.1 lpm (pump PTO) (7.0 + 3.5 U.S.gpm / 5.8 +2.9 U.K.gpm) [35.8] + 13.1 lpm (pump PTO) ([9.5] + 3.5 U.S.gpm / [7.9] + 2.9 U.K.gpm)

※ [] Rotating option

9) CYLINDER

Item			Specification
Boom cylinder	Bore dia × Rod dia × Stroke		Ø 105 × Ø 75 × 1075mm
	Cushion		Extend only
Arm cylinder	Bore dia × Rod dia × Stroke		Ø 115 × Ø 80 × 1138mm
	Cushion		Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke		Ø 100 × Ø 70 × 840mm
	Cushion		Extend only
Dozer cylinder	Rear	Bore dia × Rod dia × Stroke	Ø 100 × Ø 60 × 236mm
	Front	Bore dia × Rod dia × Stroke	Ø 100 × Ø 60 × 240mm
	Cushion		-
Outrigger cylinder	Bore dia × Rod dia × Stroke		Ø 110 × Ø 65 × 446mm
	Cushion		-
Adjust cylinder	Bore dia × Rod dia × Stroke		Ø 145 × Ø 90 × 613mm
	Cushion		-
Adjust boom cylinder	Bore dia × Rod dia × Stroke		Ø 105 × Ø 75 × 975mm
	Cushion		Extend only

10) BUCKET

Item	Capacity		Tooth quantity	Width	
	SAE heaped	CECE heaped		Without side cutter	With side cutter
Standard	※ 0.58 m ³ (0.76 yd ³)	0.50 m ³ (0.65 yd ³)	5	1030 mm (40.6")	1130 mm (44.5")
Option	0.23 m ³ (0.30 yd ³)	0.20 m ³ (0.26 yd ³)	3	520 mm (20.5")	620 mm (24.4")
	0.40 m ³ (0.52 yd ³)	0.35 m ³ (0.46 yd ³)	4	760 mm (29.9")	860 mm (33.9")
	0.46 m ³ (0.60 yd ³)	0.40 m ³ (0.52 yd ³)	4	850 mm (33.5")	950 mm (37.4")
	0.52 m ³ (0.68 yd ³)	0.45 m ³ (0.59 yd ³)	5	935 mm (36.8")	1035 mm (40.7")
	0.65 m ³ (0.85 yd ³)	0.55 m ³ (0.72 yd ³)	5	1110 mm (43.7")	1210 mm (47.6")
	0.71 m ³ (0.93 yd ³)	0.60 m ³ (0.78 yd ³)	5	1205 mm (47.4")	1305 mm (51.4")
	◎ 0.55 m ³ (0.72 yd ³)	0.45 m ³ (0.59 yd ³)	-	1800 mm (70.9")	-
	★ 0.45 m ³ (0.59 yd ³)	0.40 m ³ (0.52 yd ³)	-	1520 mm (59.8")	-

◎ : Slope finishing bucket

★ : Ditch cleaning bucket

8. 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)
Engine oil pan	Engine oil	23.7 (6.3)	★SAE 5W-40							
							SAE 30			
Transmission case			SAE 10W							
		2.5 (0.7)	SAE 10W-30							
	SAE 15W-40									
DEF/ AdBlue® tank	Mixture of urea and deionized water	27.0 (7.1)	ISO 22241, High-purity urea + deionized water (32.5:67.5)							
Swing drive	Gear oil	TYPE 1 : 3.5 (0.9)	★SAE 75W-90							
		TYPE 2 : 2.5 (0.7)	SAE 80W-90							
Front axle	Gear oil	Center : 9.0 (2.38) Hub : 2.4×2 (0.63×2)	SAE 85W-90 LSD or UTTO							
Rear axle		Center : 11.2 (2.96) Hub : 2.4×2 (0.63×2)								
Hydraulic tank	Hydraulic oil	Tank: 124 (32.8) System: 210 (55.5)	★ISO VG 15							
			ISO VG 32							
			ISO VG 46, HBHO VG 46★ ³							
			ISO VG 68							
Fuel tank	Diesel fuel★ ¹	270 (71.3)	★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	19.5 (5.2)	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

UTTO : Universal Tractor Transmission Oil

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.