

SECTION 1 GENERAL



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SECTION 1 GENERAL

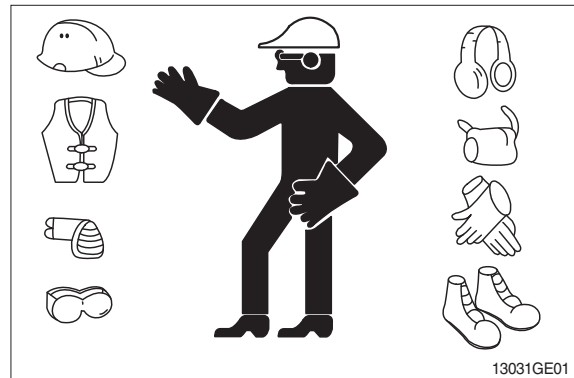
GROUP 1 SAFETY

FOLLOW SAFE PROCEDURE

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

WEAR PROTECTIVE CLOTHING

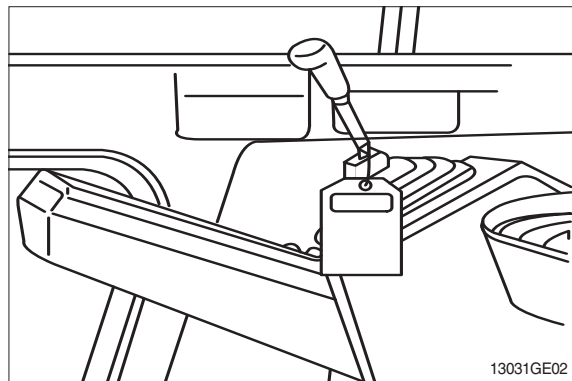
Wear close fitting clothing and safety equipment appropriate to the job.



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.



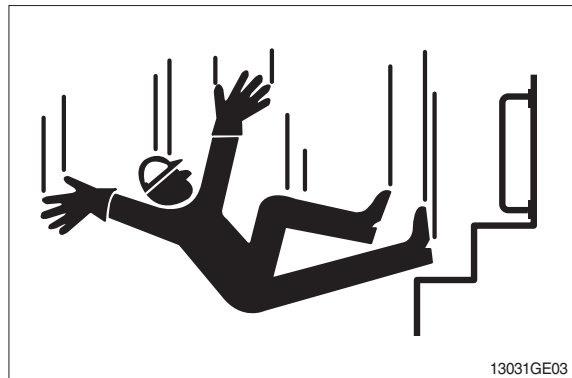
USE HANDHOLDS AND STEPS

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.

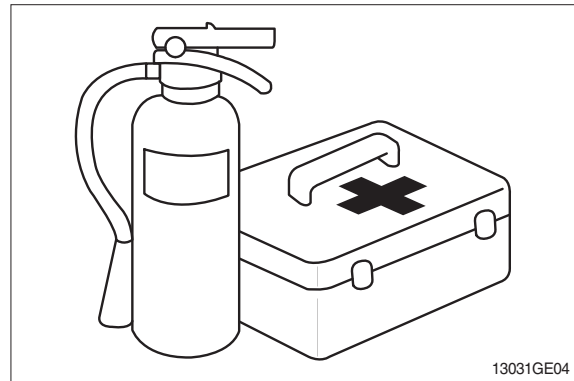


PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

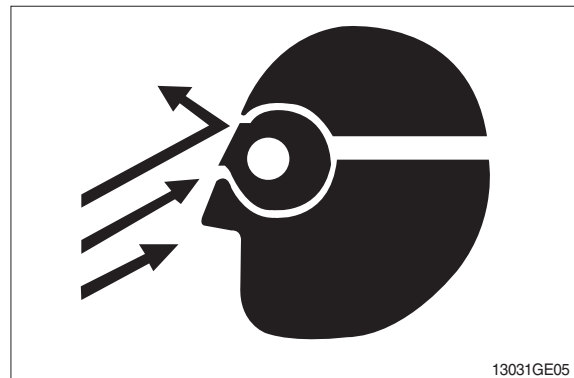
Keep a first aid kit and fire extinguisher handy.

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.

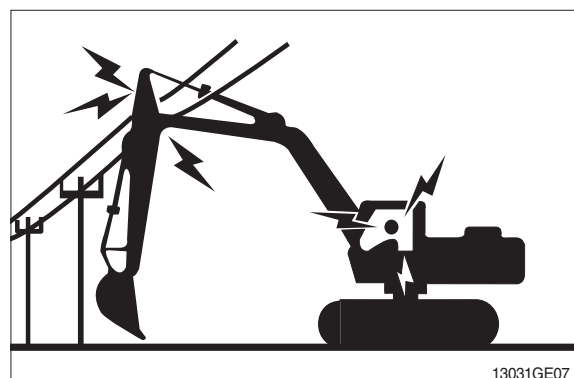
Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.



AVOID POWER LINES

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

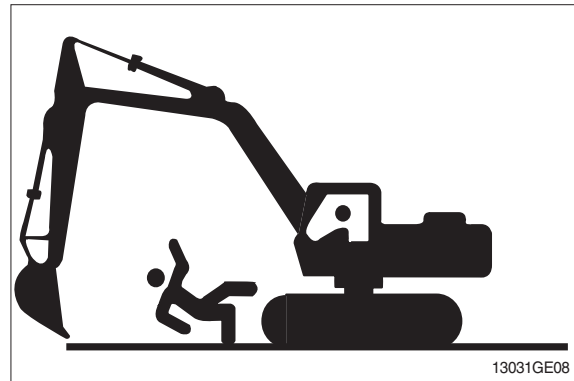
Never move any part of the machine or load closer to electric line than 3m(10ft) plus twice the line insulator length.



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.

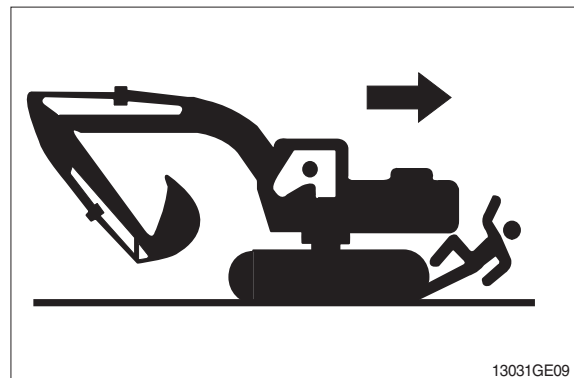


MOVE AND OPERATE MACHINE SAFELY

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:

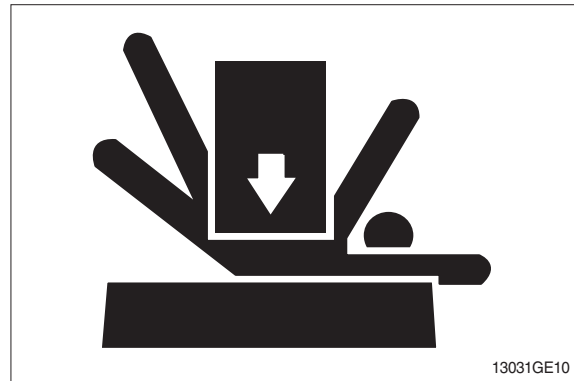
- Park machine on a level surface.
- Lower bucket to the ground.
- Turn auto idle switch off.
- Run engine at 1/2 speed without load for 2 minutes.
- Turn key switch to OFF to stop engine. Remove key from switch.
- Move pilot control shutoff lever to locked position.
- Allow engine to cool.

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

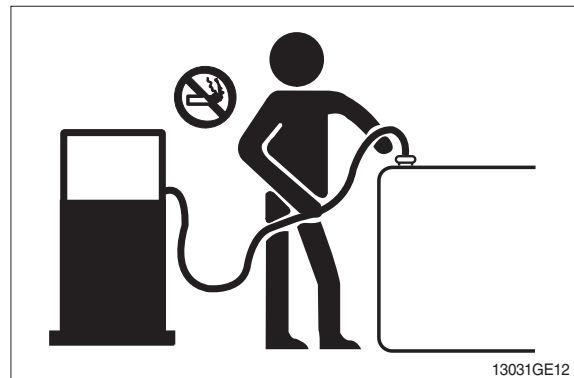
Explosive release of fluids from pressurized cooling system can cause serious burns.

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

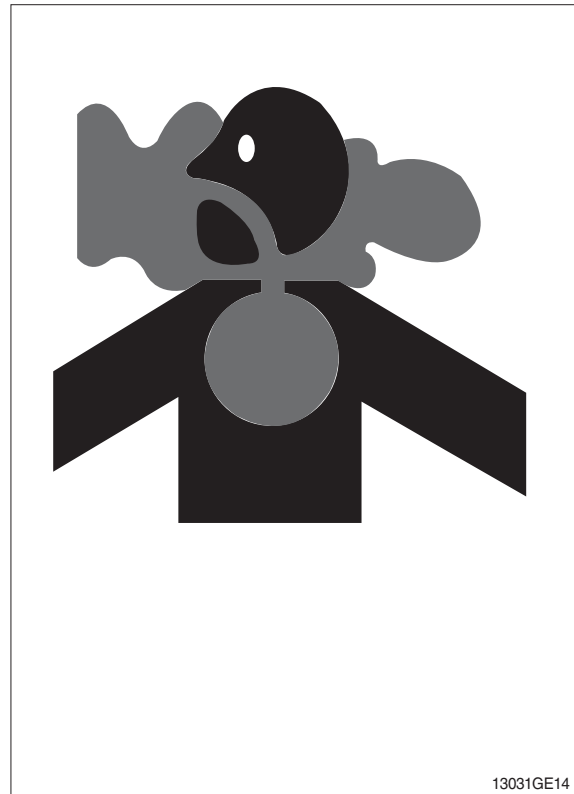
Avoid potentially toxic fumes and dust.

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

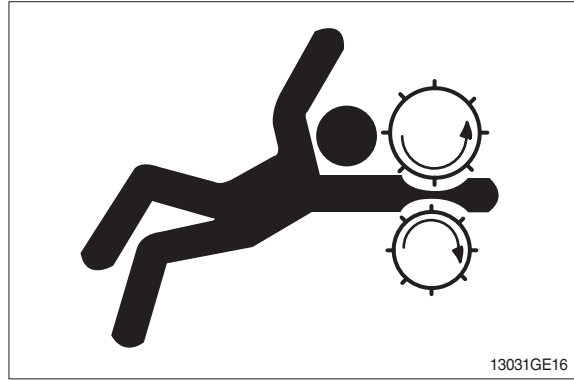
Illuminate your work area adequately but safely. Use a portable safety light for working inside or under the machine. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.



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.

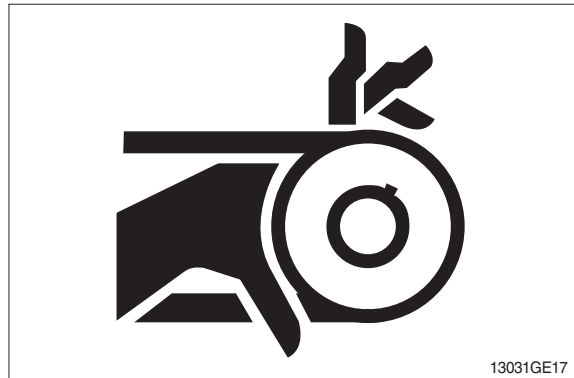
Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.



STAY CLEAR OF MOVING PARTS

Entanglements in moving parts can cause serious injury.

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



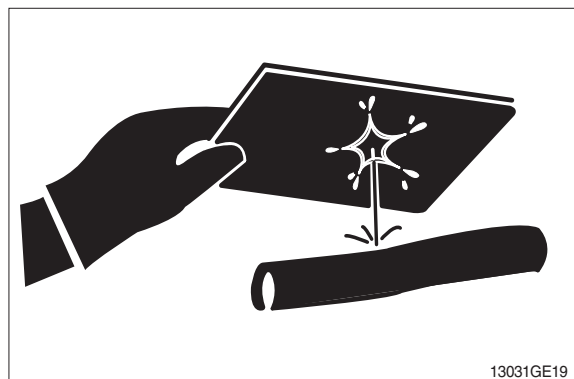
AVOID HIGH PRESSURE FLUIDS

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:

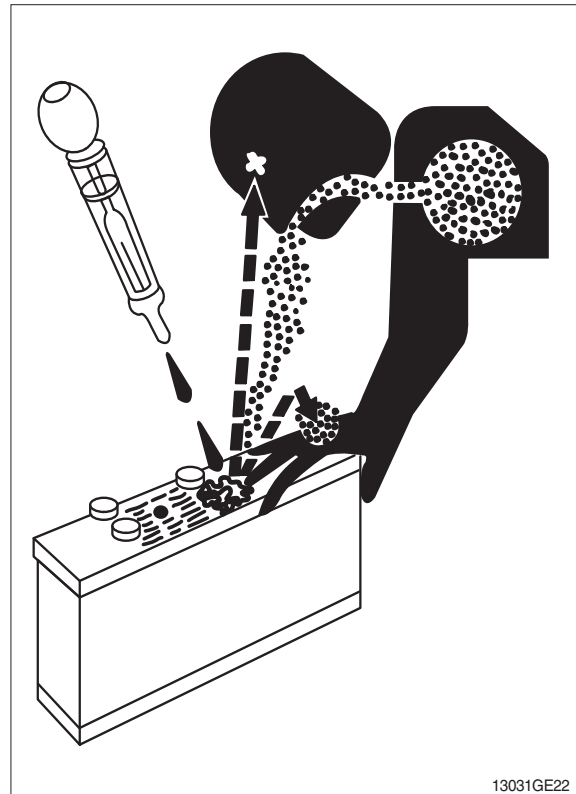
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

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.



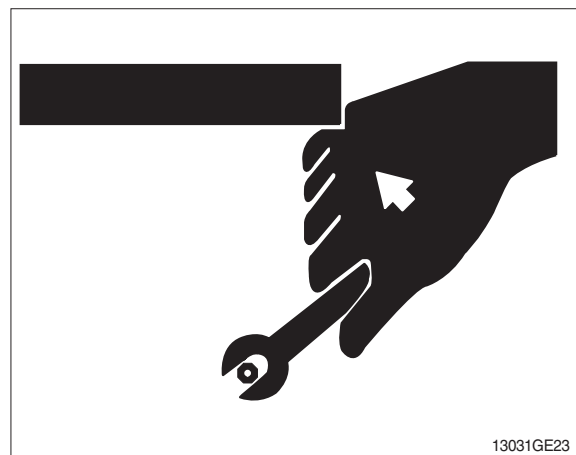
USE TOOLS PROPERLY

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.)

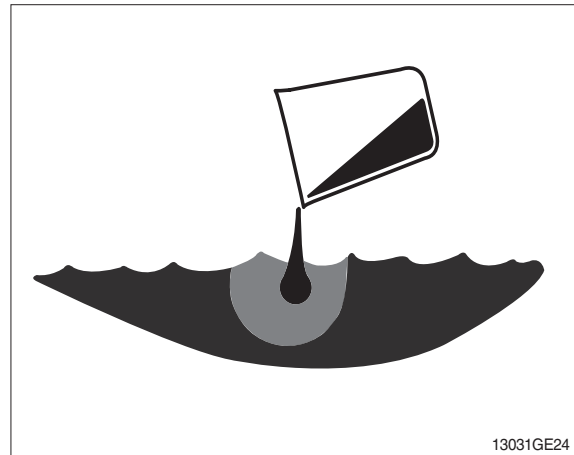


DISPOSE OF FLUIDS PROPERLY

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.

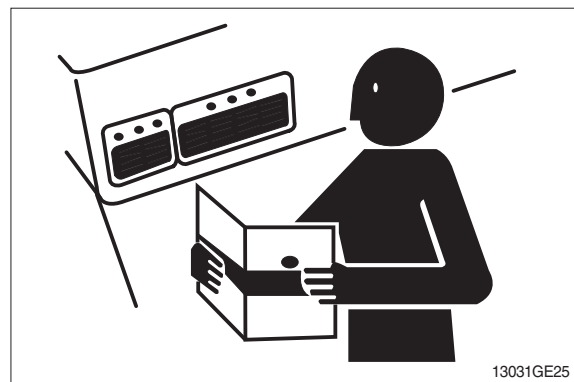
DO NOT pour oil into the ground, down a drain, or into a stream, pond, or lake. Observe relevant environmental protection regulations when disposing of oil, fuel, coolant, brake fluid, filters, batteries, and other harmful waste.



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REPLACE SAFETY SIGNS

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



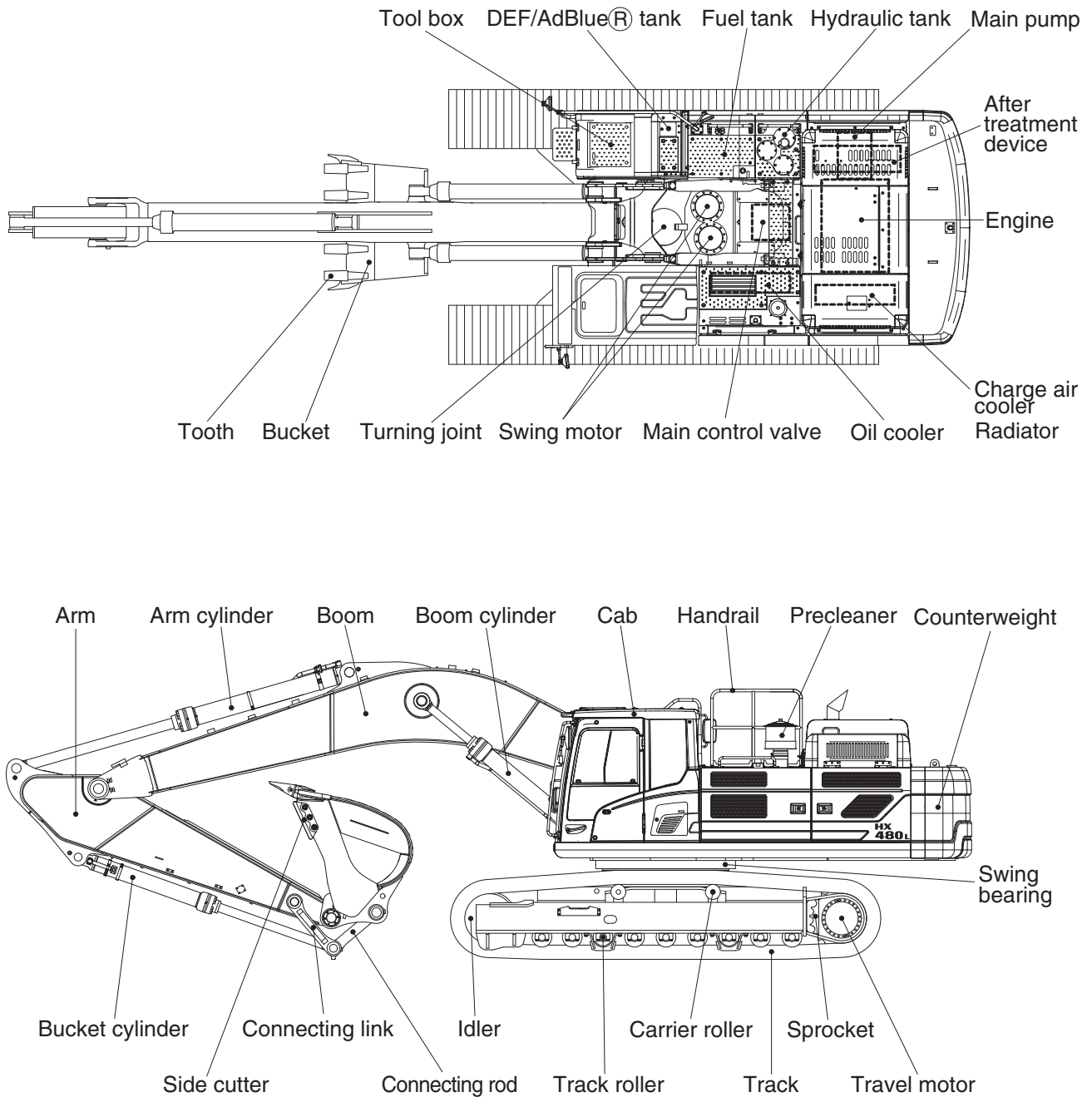
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LIVE WITH SAFETY

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

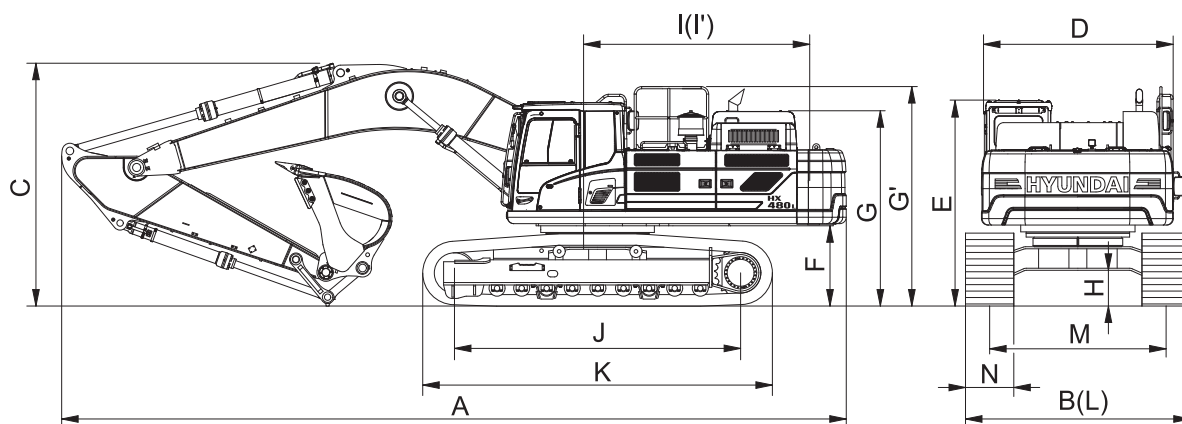


480F2SP01

2. SPECIFICATIONS

1) HX480 L

· 7.06 m (23' 2") BOOM, 3.38 m (11' 1") ARM

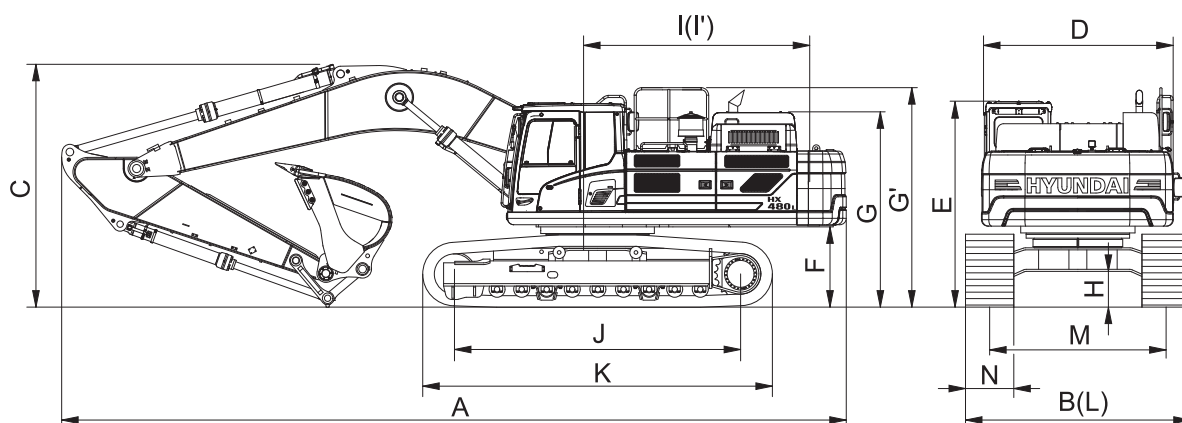


480F2SP02

Description		Unit	Specification
Operating weight		kg (lb)	49500 (109130)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	12260 (40' 3")
Overall width, with 600 mm shoe	B		3340 (10' 11")
Overall height	C		3790 (12' 5")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3220 (10' 7")
Ground clearance of counterweight	F		1295 (4' 3")
Engine cover height	G		2890 (9' 6")
Overall height of handrail	G'		3450 (11' 3")
Minimum ground clearance	H		560 (1' 10")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width	L		3340 (10' 11")
Track gauge	M		2740 (9' 0")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)
Swing speed		rpm	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.86 (12.23)
Max traction force		kg (lb)	34100 (75180)

2) HX480 L

· 7.06 m (23' 2") BOOM, 2.40 m (7' 10") ARM

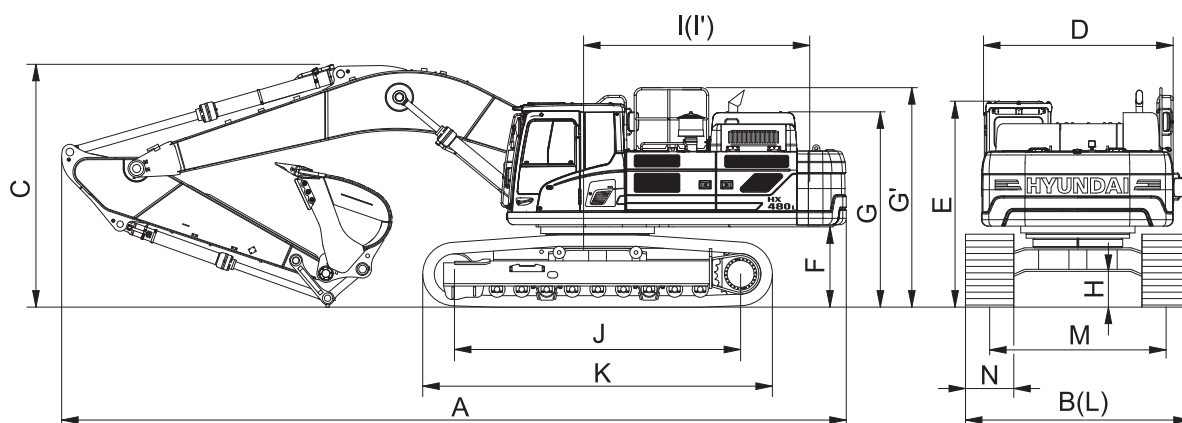


480F2SP02

Description		Unit	Specification
Operating weight		kg (lb)	49260 (108600)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	12510 (41' 1")
Overall width, with 600 mm shoe	B		3340 (10' 11")
Overall height	C		4010 (13' 2")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3220 (10' 7")
Ground clearance of counterweight	F		1295 (4' 3")
Engine cover height	G		2890 (9' 6")
Overall height of handrail	G'		3450 (11' 3")
Minimum ground clearance	H		560 (1' 10")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width	L		3340 (10' 11")
Track gauge	M		2740 (9' 0")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)
Swing speed		rpm	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.86 (12.23)
Max traction force		kg (lb)	34100 (75180)

3) HX480 L

· 7.06 m (23' 2") BOOM, 2.90 m (9' 6") ARM

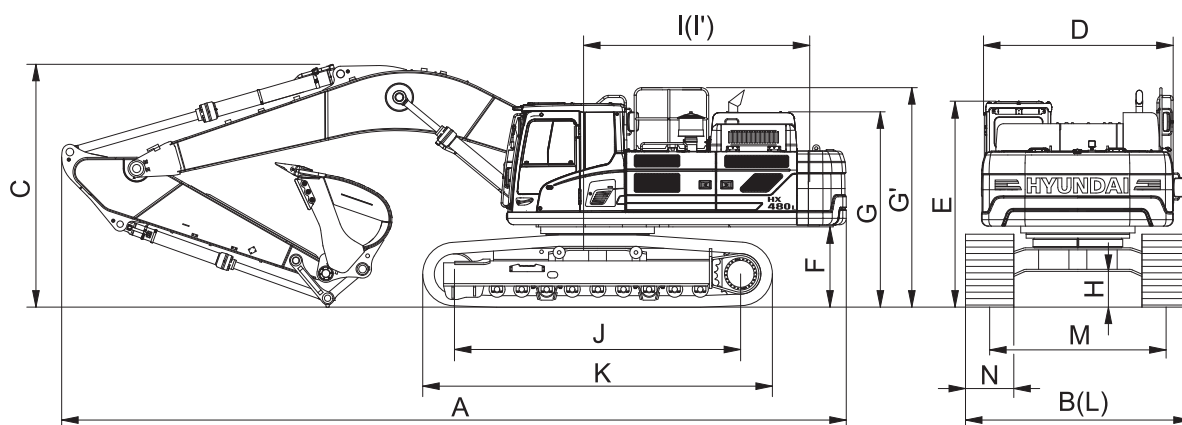


480F2SP02

Description		Unit	Specification
Operating weight		kg (lb)	49460 (109040)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	12390 (40' 8")
Overall width, with 600 mm shoe	B		3340 (10' 11")
Overall height	C		3900 (12' 10")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3220 (10' 7")
Ground clearance of counterweight	F		1295 (4' 3")
Engine cover height	G		2890 (9' 6")
Overall height of handrail	G'		3450 (11' 3")
Minimum ground clearance	H		560 (1' 10")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width	L		3340 (10' 11")
Track gauge	M		2740 (9' 0")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)
Swing speed		rpm	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.86 (12.23)
Max traction force		kg (lb)	34100 (75180)

4) HX480 L

· 7.06 m (23' 2") BOOM, 4.00 m (13' 1") ARM

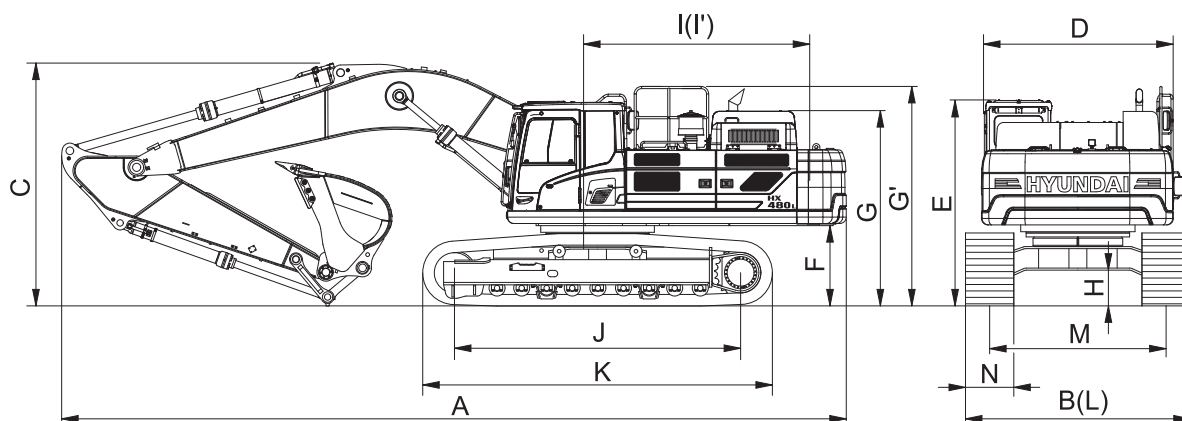


480F2SP02

Description		Unit	Specification
Operating weight		kg (lb)	49600 (109350)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	12230 (40' 1")
Overall width, with 600 mm shoe	B		3340 (10' 11")
Overall height	C		4110 (13' 6")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3220 (10' 7")
Ground clearance of counterweight	F		1295 (4' 3")
Engine cover height	G		2890 (9' 6")
Overall height of handrail	G'		3450 (11' 3")
Minimum ground clearance	H		560 (1' 10")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width	L		3340 (10' 11")
Track gauge	M		2740 (9' 0")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)
Swing speed		rpm	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.86 (12.23)
Max traction force		kg (lb)	34100 (75180)

5) HX480 L

· 6.55 m (21' 6") BOOM, 2.40 m (7' 10") ARM

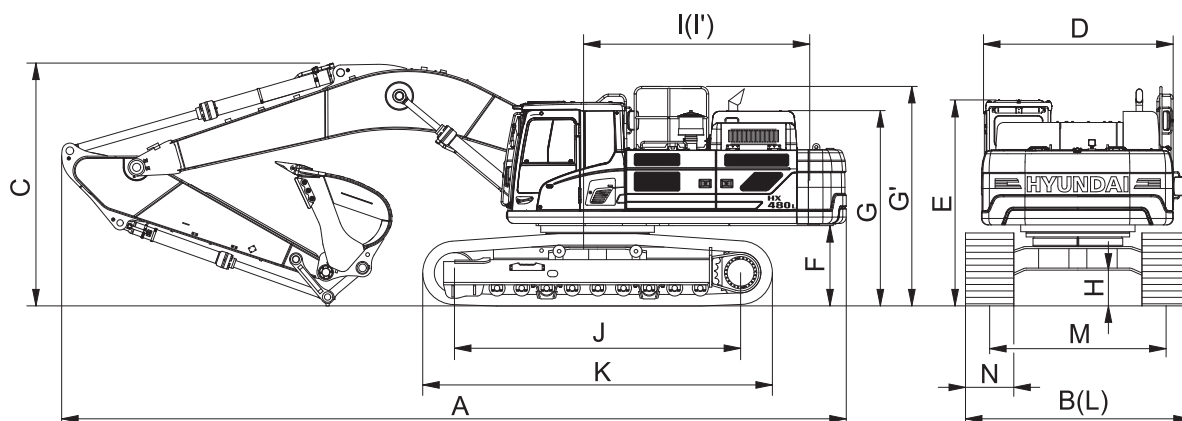


480F2SP02

Description		Unit	Specification
Operating weight		kg (lb)	49220 (108510)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	11990 (39' 4")
Overall width, with 600 mm shoe	B		3340 (10' 11")
Overall height	C		4130 (13' 7")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3220 (10' 7")
Ground clearance of counterweight	F		1295 (4' 3")
Engine cover height	G		2890 (9' 6")
Overall height of handrail	G'		3450 (11' 3")
Minimum ground clearance	H		560 (1' 10")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width	L		3340 (10' 11")
Track gauge	M		2740 (9' 0")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)
Swing speed		rpm	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.86 (12.23)
Max traction force		kg (lb)	34100 (75180)

6) HX480 L

· 6.55 m (21' 6") BOOM, 2.90 m (9' 6") ARM

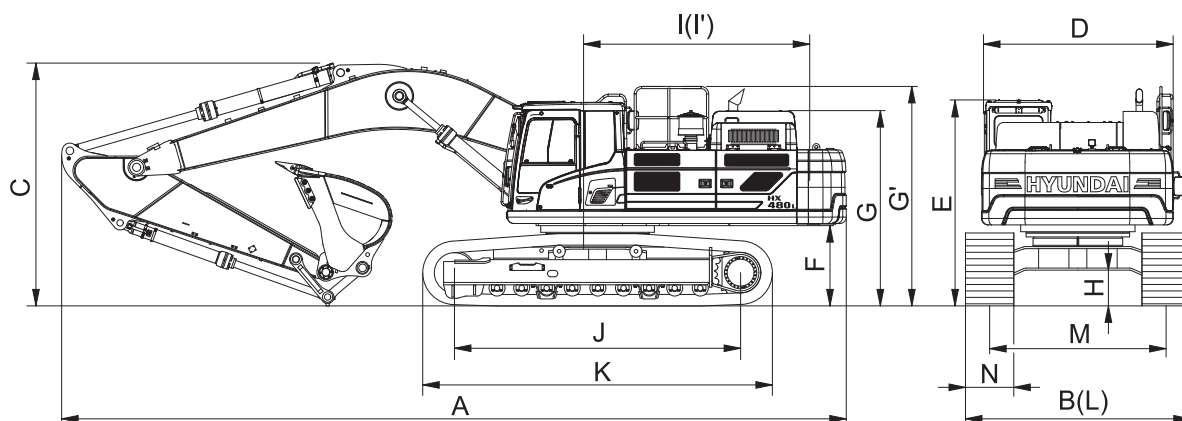


480F2SP02

Description		Unit	Specification
Operating weight		kg (lb)	49420 (108950)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	11870 (38' 11")
Overall width, with 600 mm shoe	B		3340 (10' 11")
Overall height	C		4050 (13' 3")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3220 (10' 7")
Ground clearance of counterweight	F		1295 (4' 3")
Engine cover height	G		2890 (9' 6")
Overall height of handrail	G'		3450 (11' 3")
Minimum ground clearance	H		560 (1' 10")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width	L		3340 (10' 11")
Track gauge	M		2740 (9' 0")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)
Swing speed		rpm	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.86 (12.23)
Max traction force		kg (lb)	34100 (75180)

7) HX480 L

· 9.00 m (29' 6") BOOM, 6.00 m (19' 8") ARM

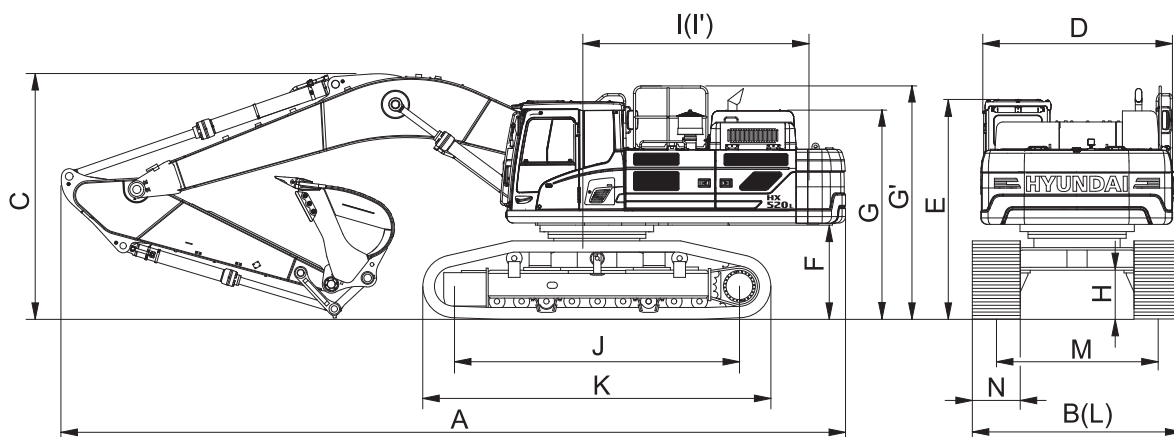


480F2SP02

Description		Unit	Specification
Operating weight		kg (lb)	50550 (111440)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	1.38 (1.80)
Overall length	A	mm (ft-in)	14230 (46' 8")
Overall width, with 600 mm shoe	B		3640 (11' 11")
Overall height	C		3990 (13' 1")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3220 (10' 7")
Ground clearance of counterweight	F		1295 (4' 3")
Engine cover height	G		2890 (9' 6")
Overall height of handrail	G'		3450 (11' 3")
Minimum ground clearance	H		560 (1' 10")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width	L		3340 (10' 11")
Track gauge	M		2740 (9' 0")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.3 (2.1/3.3)
Swing speed		rpm	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.86 (12.23)
Max traction force		kg (lb)	34100 (75180)

8) HX520 L

· 7.06 m (23' 2") BOOM, 3.38 m (11' 1") ARM

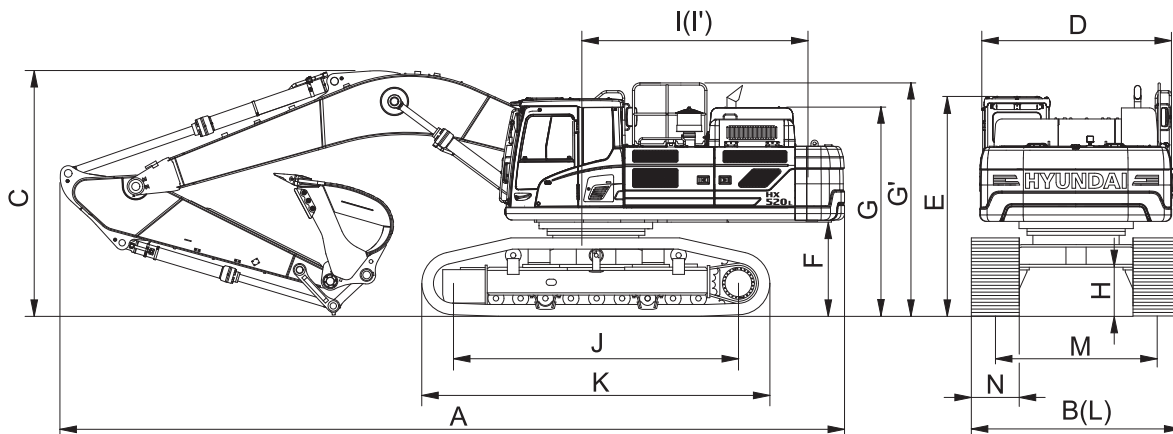


480F2SP03

Description		Unit	Specification
Operating weight		kg (lb)	52400 (115520)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	12260 (40' 3")
Overall width, with 600 mm shoe (transport position / working position)	B		2980/3540 (9' 10"/11' 7")
Overall height	C		3790 (12' 5")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3340 (10' 11")
Ground clearance of counterweight	F		1445 (4' 9")
Engine cover height	G		3030 (9' 11")
Overall height of handrail	G'		3595 (11' 8")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width (transport position / working position)	L		2990/3540 (9' 10"/11' 7")
Track gauge (transport position / working position)	M		2380/2940 (7' 10"/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	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.91 (12.94)
Max traction force		kg (lb)	34100 (75180)

9) HX520 L

· 7.06 m (23' 2") BOOM, 2.40 m (7' 10") ARM

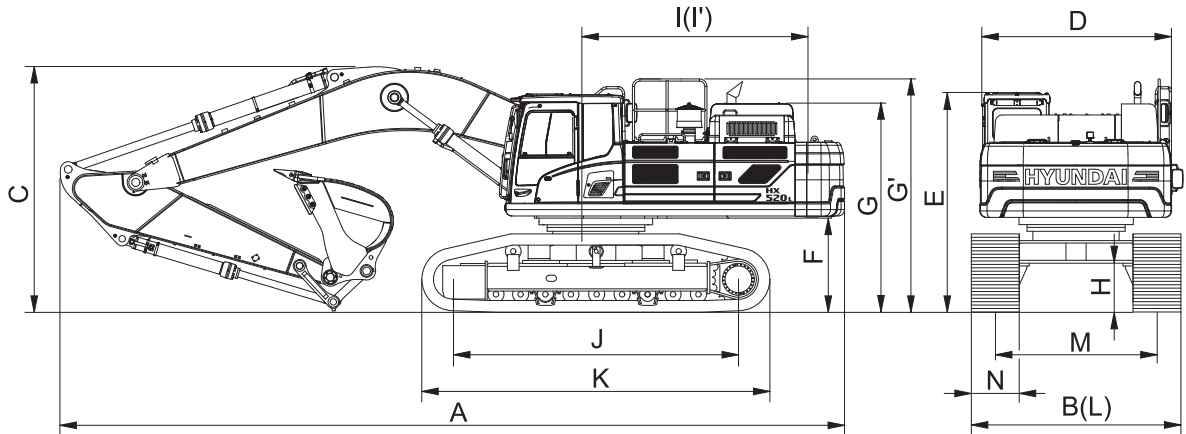


480F2SP03

Description		Unit	Specification
Operating weight		kg (lb)	52160 (114990)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	12510 (41' 1")
Overall width, with 600 mm shoe (transport position / working position)	B		2980/3540 (9' 10"/11' 7")
Overall height	C		4070 (13' 4")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3340 (10' 11")
Ground clearance of counterweight	F		1445 (4' 9")
Engine cover height	G		3030 (9' 11")
Overall height of handrail	G'		3595 (11' 8")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width (transport position / working position)	L		2990/3540 (9' 10"/11' 7")
Track gauge (transport position / working position)	M		2380/2940 (7' 10"/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	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.91 (12.94)
Max traction force		kg (lb)	34100 (75180)

10) HX520 L

· 7.06 m (23' 2") BOOM, 2.90 m (9' 6") ARM

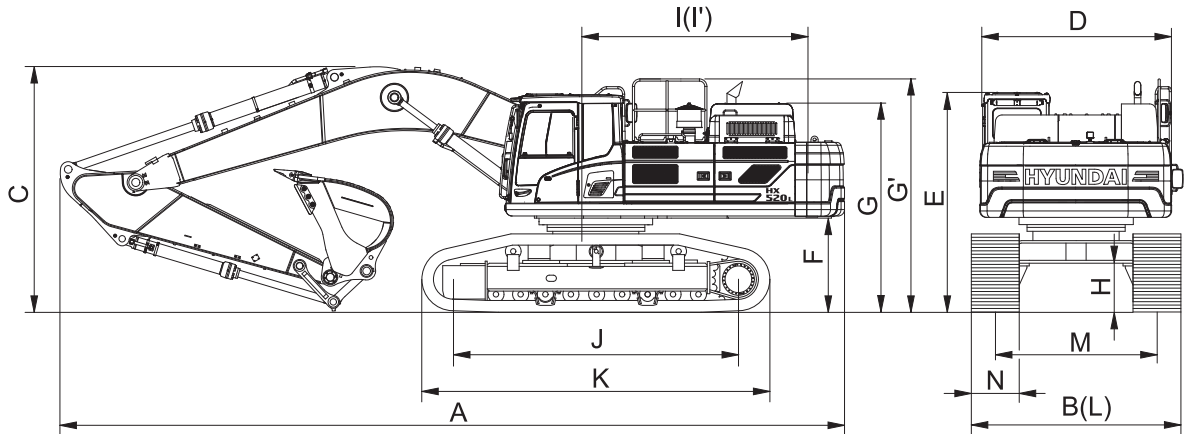


480F2SP03

Description		Unit	Specification
Operating weight		kg (lb)	52360 (115430)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	12380 (40' 7")
Overall width, with 600 mm shoe (transport position / working position)	B		2980/3540 (9' 10"/11' 7")
Overall height	C		3920 (12' 10")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3340 (10' 11")
Ground clearance of counterweight	F		1445 (4' 9")
Engine cover height	G		3030 (9' 11")
Overall height of handrail	G'		3595 (11' 8")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width (transport position / working position)	L		2990/3540 (9' 10"/11' 7")
Track gauge (transport position / working position)	M		2380/2940 (7' 10"/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	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.91 (12.94)
Max traction force		kg (lb)	34100 (75180)

11)HX520 L

· 7.06 m (23' 2") BOOM, 4.00 m (13' 1") ARM

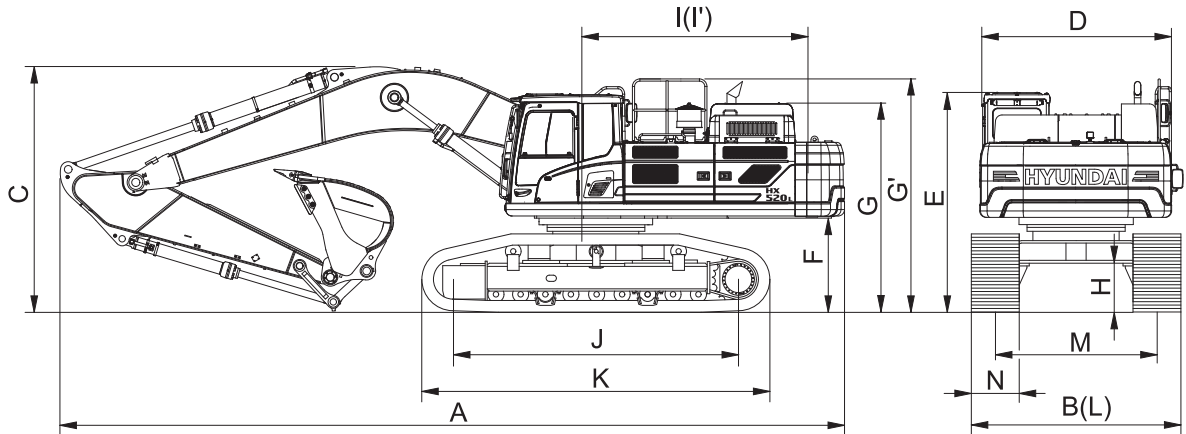


480F2SP03

Description		Unit	Specification
Operating weight		kg (lb)	52500 (115740)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	12250 (40' 2")
Overall width, with 600 mm shoe (transport position / working position)	B		2980/3540 (9' 10"/11' 7")
Overall height	C		4090 (13' 5")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3340 (10' 11")
Ground clearance of counterweight	F		1445 (4' 9")
Engine cover height	G		3030 (9' 11")
Overall height of handrail	G'		3595 (11' 8")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width (transport position / working position)	L		2990/3540 (9' 10"/11' 7")
Track gauge (transport position / working position)	M		2380/2940 (7' 10"/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	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.91 (12.94)
Max traction force		kg (lb)	34100 (75180)

12) HX520 L

· 6.55 m (21' 6") BOOM, 2.40 m (7' 10") ARM

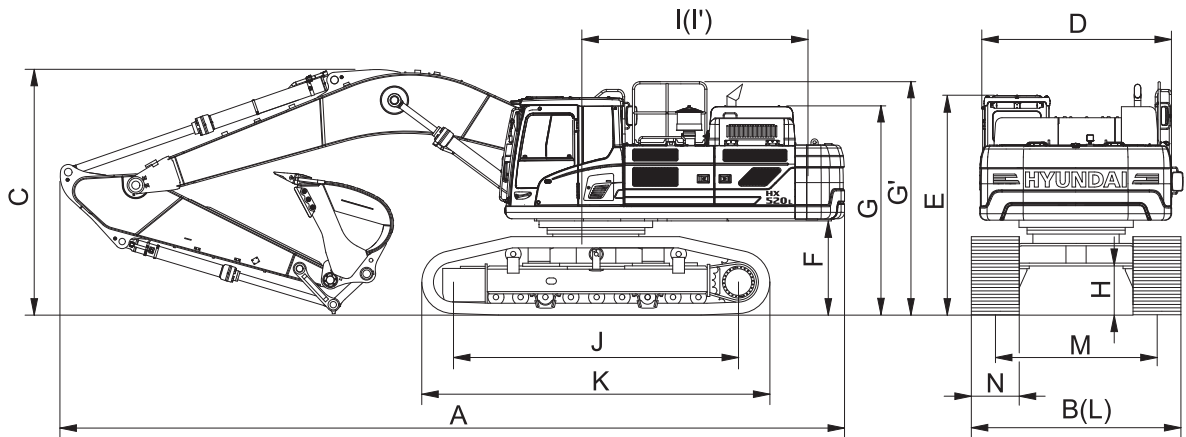


480F2SP03

Description		Unit	Specification
Operating weight		kg (lb)	52120 (114900)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	12000 (39' 4")
Overall width, with 600 mm shoe (transport position / working position)	B		2980/3540 (9' 10"/11' 7")
Overall height	C		4190 (13' 9")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3340 (10' 11")
Ground clearance of counterweight	F		1445 (4' 9")
Engine cover height	G		3030 (9' 11")
Overall height of handrail	G'		3595 (11' 8")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width (transport position / working position)	L		2990/3540 (9' 10"/11' 7")
Track gauge (transport position / working position)	M		2380/2940 (7' 10"/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	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.91 (12.94)
Max traction force		kg (lb)	34100 (75180)

13) HX520 L

· 6.55 m (21' 6") BOOM, 2.90 m (9' 6") ARM

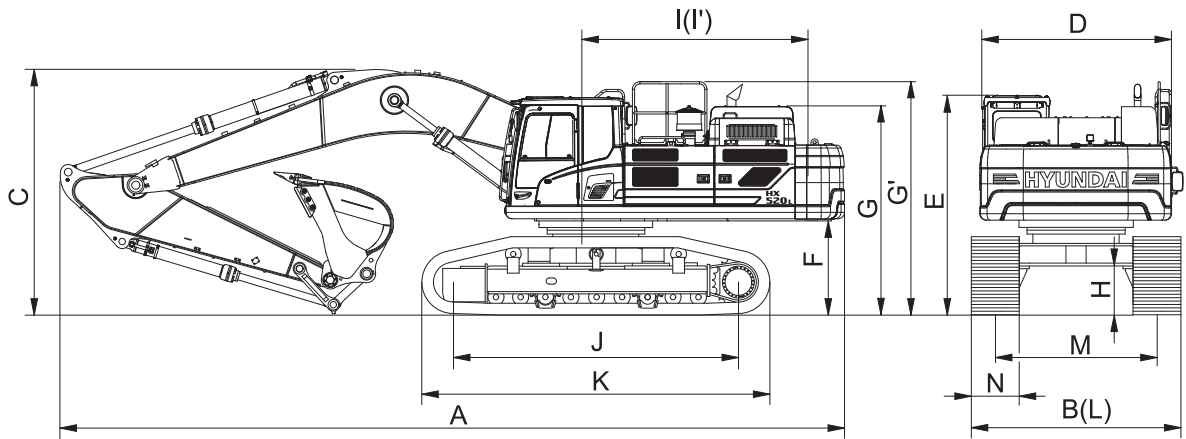


480F2SP03

Description		Unit	Specification
Operating weight		kg (lb)	52320 (115350)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.20 (2.88)
Overall length	A	mm (ft-in)	11870 (38' 11")
Overall width, with 600 mm shoe (transport position / working position)	B		2980/3540 (9' 10"/11' 7")
Overall height	C		4080 (13' 5")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3340 (10' 11")
Ground clearance of counterweight	F		1445 (4' 9")
Engine cover height	G		3030 (9' 11")
Overall height of handrail	G'		3595 (11' 8")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width (transport position / working position)	L		2990/3540 (9' 10"/11' 7")
Track gauge (transport position / working position)	M		2380/2940 (7' 10"/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	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.91 (12.94)
Max traction force		kg (lb)	34100 (75180)

14) HX520 L

· 9.00 m (29' 6") BOOM, 6.00 m (19' 8") ARM



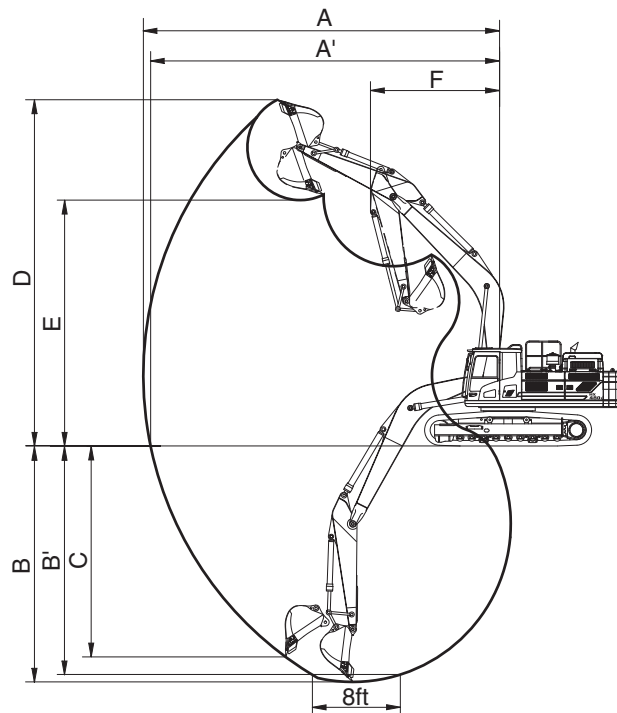
480F2SP03

Description		Unit	Specification
Operating weight		kg (lb)	53410 (117750)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	1.38 (1.80)
Overall length	A	mm (ft-in)	14200 (46' 7")
Overall width, with 600 mm shoe (transport position / working position)	B		2980/3540 (9' 9"/11' 7")
Overall height	C		3960 (13' 0")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3390 (11' 2")
Ground clearance of counterweight	F		1445 (4' 9")
Engine cover height	G		2980 (9' 9")
Overall height of handrail	G'		3595 (11' 8")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3885 (12' 9")
Rear-end swing radius	I'		3940 (12' 11")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5405 (17' 7")
Undercarriage width (transport position / working position)	L		2980/3540 (9' 9"/11' 7")
Track gauge (transport position / working position)	M		2380/2940 (7' 10"/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	8.6
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.91 (12.94)
Max traction force		kg (lb)	34100 (75180)

3. WORKING RANGE

1) HX480 L

· 7.06 m (23' 2") BOOM



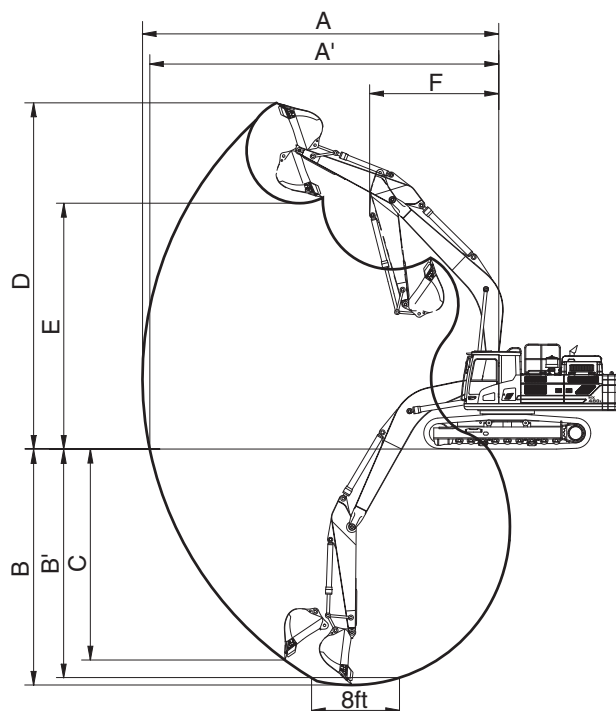
480F2SP04

Description		2.40 m (7' 10") Arm	2.90 m (9' 6") Arm	3.38 m (11' 1") Arm	4.00 m (13' 1") Arm
Max digging reach	A	11200 mm (36' 9")	11620 mm (38' 1")	12040 mm (39' 6")	12600 mm (41' 4")
Max digging reach on ground	A'	10980 mm (36' 0")	11410 mm (37' 5")	11840 mm (38' 10")	12410 mm (40' 9")
Max digging depth	B	6780 mm (22' 3")	7280 mm (23' 11")	7760 mm (25' 6")	8380 mm (27' 6")
Max digging depth (8ft level)	B'	6600 mm (21' 8")	7120 mm (23' 4")	7620 mm (25' 0")	8250 mm (27' 1")
Max vertical wall digging depth	C	4790 mm (15' 9")	5800 mm (19' 0")	5920 mm (19' 5")	6470 mm (21' 3")
Max digging height	D	10600 mm (34' 9")	10830 mm (35' 6")	10910 mm (35' 10")	11130 mm (36' 6")
Max dumping height	E	7260 mm (23' 10")	7390 mm (24' 3")	7540 mm (24' 9")	7760 mm (25' 6")
Min swing radius	F	5160 mm (16' 11")	4890 mm (16' 1")	4850 mm (15' 11")	4710 mm (15' 5")
Bucket digging force	SAE	220.7 [240.8] kN	220.7 [240.8] kN	220.7 [240.8] kN	220.7 [240.8] kN
		22500 [24550] kgf	22500 [24550] kgf	22500 [24550] kgf	22500 [24550] kgf
		49600 [54120] lbf	49600 [54120] lbf	49600 [54120] lbf	49600 [54120] lbf
	ISO	255.0 [278.1] kN	255.0 [278.1] kN	255.0 [278.1] kN	255.0 [278.1] kN
		26000 [28360] kgf	26000 [28360] kgf	26000 [28360] kgf	26000 [28360] kgf
		57320 [62520] lbf	57320 [62520] lbf	57320 [62520] lbf	57320 [62520] lbf
Arm crowd force	SAE	276.6 [301.7] kN	224.6 [245.0] kN	191.2 [208.6] kN	170.6 [186.1] kN
		28200 [30760] kgf	22900 [24980] kgf	19500 [21270] kgf	17400 [18980] kgf
		62170 [67810] lbf	50490 [55070] lbf	42990 [46890] lbf	38360 [41840] lbf
	ISO	290.3 [316.7] kN	234.4 [255.7] kN	199.1 [217.2] kN	176.5 [192.6] kN
		29600 [32290] kgf	23900 [26070] kgf	20300 [22150] kgf	18000 [19640] kgf
		65260 [71190] lbf	52690 [57470] lbf	44750 [48830] lbf	39680 [43300] lbf

[] : Power boost

2) HX480 L

· 6.55 m (21' 6") BOOM



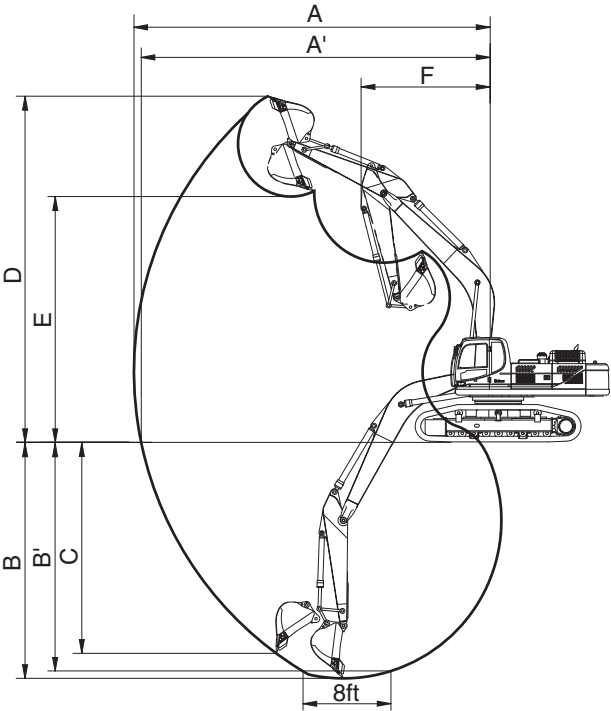
480F2SP04

Description		2.40 m (7' 10") Arm	2.90 m (9' 6") Arm
Max digging reach	A	10690 mm (35' 1")	11130 mm (36' 6")
Max digging reach on ground	A'	10470 mm (34' 4")	10910 mm (35' 10")
Max digging depth	B	6390 mm (21' 0")	6890 mm (22' 7")
Max digging depth (8ft level)	B'	6210 mm (20' 4")	6730 mm (22' 1")
Max vertical wall digging depth	C	4510 mm (14' 10")	5550 mm (18' 3")
Max digging height	D	10240 mm (33' 7")	10510 mm (34' 6")
Max dumping height	E	6890 mm (22' 7")	7060 mm (23' 2")
Min swing radius	F	4870 mm (16' 0")	4540 mm (14' 11")
Bucket digging force	SAE	220.7 [240.8] kN	220.7 [240.8] kN
		22500 [24550] kgf	22500 [24550] kgf
		49600 [54120] lbf	49600 [54120] lbf
	ISO	255.0 [278.1] kN	255.0 [278.1] kN
		26000 [28360] kgf	26000 [28360] kgf
		57320 [62520] lbf	57320 [62520] lbf
Arm crowd force	SAE	276.6 [301.7] kN	224.6 [245.0] kN
		28200 [30760] kgf	22900 [24980] kgf
		62170 [67810] lbf	50490 [55070] lbf
	ISO	290.3 [316.7] kN	234.4 [255.7] kN
		29600 [32290] kgf	23900 [26070] kgf
		65260 [71190] lbf	52690 [57470] lbf

[] : Power boost

3) HX480 L

· 9.00 m (29' 6") BOOM

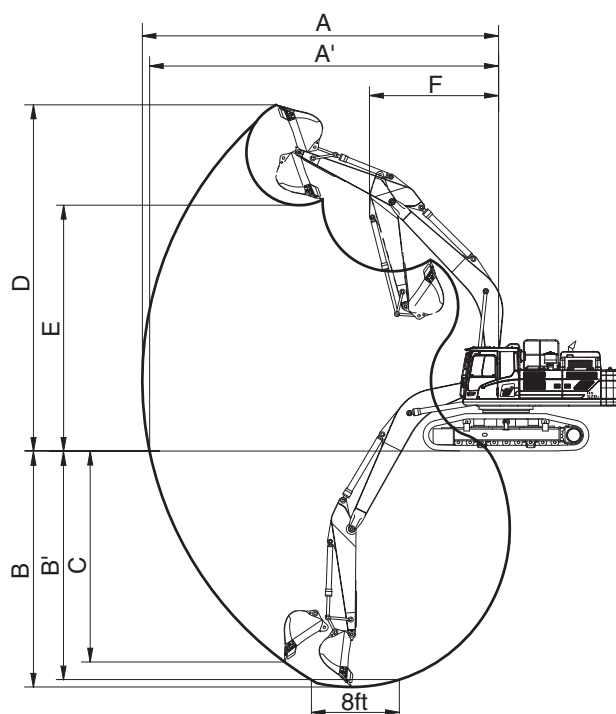


4809A2SP04

Description		6.00 m (19' 8") Arm
Max digging reach	A	16180 mm (53' 1")
Max digging reach on ground	A'	16030 mm (52' 7")
Max digging depth	B	12020 mm (39' 5")
Max digging depth (8ft level)	B'	11920 mm (39' 1")
Max vertical wall digging depth	C	8510 mm (27'11")
Max digging height	D	12440 mm (40'10")
Max dumping height	E	9260 mm (30' 5")
Min swing radius	F	6140 mm (20' 2")
Bucket digging force	SAE	184.4 kN
		18800 kgf
		41450 lbf
	ISO	213.8 kN
		21800 kgf
		48060 lbf
Arm crowd force	SAE	103.0 kN
		10500 kgf
		23150 lbf
	ISO	105.9 kN
		10800 kgf
		23810 lbf

4) HX520 L

· 7.06 m (23' 2") BOOM



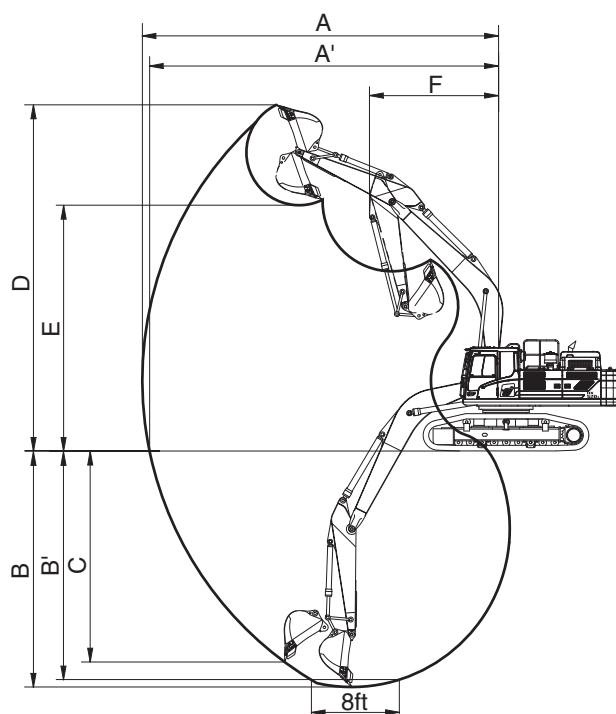
480F2SP05

Description		2.40 m (7' 10") Arm	2.90 m (9' 6") Arm	3.38 m (11' 1") Arm	4.00 m (13' 1") Arm
Max digging reach	A	11200 mm (36' 9")	11620 mm (38' 1")	12040 mm (39' 6")	12600 mm (41' 4")
Max digging reach on ground	A'	10950 mm (35' 11")	11380 mm (37' 4")	11810 mm (38' 9")	12380 mm (40' 7")
Max digging depth	B	6630 mm (21' 9")	7130 mm (23' 5")	7610 mm (25' 0")	8230 mm (27' 0")
Max digging depth (8ft level)	B'	6460 mm (21' 2")	5980 mm (22' 11")	7470 mm (24' 6")	8110 mm (26' 7")
Max vertical wall digging depth	C	4650 mm (15' 3")	5660 mm (18' 7")	5770 mm (18' 11")	6320 mm (20' 9")
Max digging height	D	10750 mm (35' 3")	10980 mm (36' 0")	11060 mm (36' 3")	11280 mm (37' 0")
Max dumping height	E	7410 mm (24' 4")	7540 mm (24' 9")	7690 mm (25' 3")	7910 mm (25' 11")
Min swing radius	F	5160 mm (16' 11")	4890 mm (16' 1")	4850 mm (15' 11")	4710 mm (15' 5")
Bucket digging force	SAE	241.2 [263.2] kN	241.2 [263.2] kN	241.2 [263.2] kN	241.2 [263.2] kN
		24600 [26840] kgf	24600 [26840] kgf	24600 [26840] kgf	24600 [26840] kgf
		54230 [59170] lbf	54230 [59170] lbf	54230 [59170] lbf	54230 [59170] lbf
	ISO	280.5 [306.0] kN	280.5 [306.0] kN	280.5 [306.0] kN	280.5 [306.0] kN
		28600 [31200] kgf	28600 [31200] kgf	28600 [31200] kgf	28600 [31200] kgf
		63050 [68780] lbf	63050 [68780] lbf	63050 [68780] lbf	63050 [68780] lbf
Arm crowd force	SAE	278.5 [303.8] kN	225.6 [246.1] kN	192.2 [209.7] kN	171.6 [187.2] kN
		28400 [30980] kgf	23000 [25090] kgf	19600 [21380] kgf	17500 [19090] kgf
		62610 [68300] lbf	50710 [55310] lbf	43210 [47130] lbf	38580 [42090] lbf
	ISO	291.3 [317.7] kN	235.4 [256.7] kN	200.1 [218.2] kN	177.5 [193.7] kN
		29700 [32400] kgf	24000 [26180] kgf	20400 [22250] kgf	18100 [19750] kgf
		65480 [71430] lbf	52910 [57720] lbf	44970 [49050] lbf	39900 [43540] lbf

[] : Power boost

5) HX520 L

· 6.55 m (21' 6") BOOM



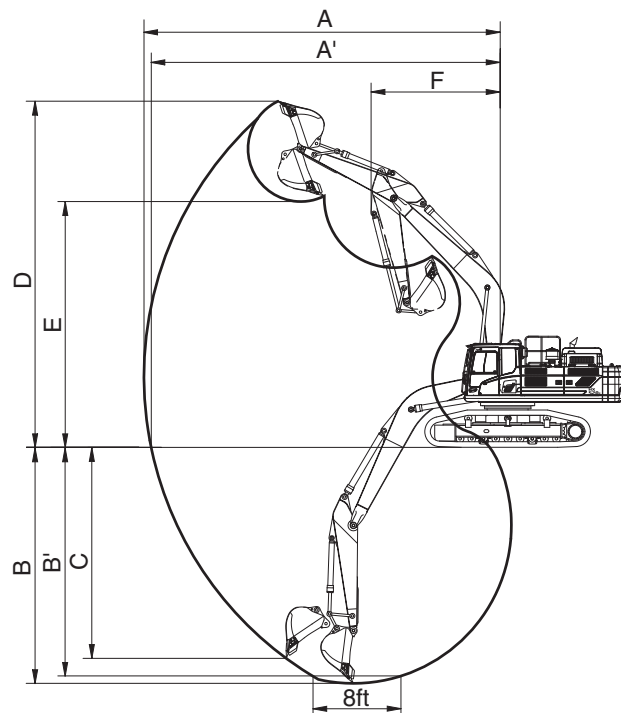
480F2SP05

Description		2.40 m (7' 10") Arm	2.90 m (9' 6") Arm
Max digging reach	A	10690 mm (35' 1")	11130 mm (36' 6")
Max digging reach on ground	A'	10430 mm (34' 3")	10870 mm (35' 8")
Max digging depth	B	6240 mm (20' 6")	6740 mm (22' 1")
Max digging depth (8ft level)	B'	6060 mm (19' 11")	6580 mm (21' 7")
Max vertical wall digging depth	C	4370 mm (14' 4")	5420 mm (17' 9")
Max digging height	D	10390 mm (34' 1")	10660 mm (35' 0")
Max dumping height	E	7040 mm (23' 1")	7210 mm (23' 8")
Min swing radius	F	4870 mm (16' 0")	4540 mm (14' 11")
Bucket digging force	SAE	241.2 [263.2] kN	241.2 [263.2] kN
		24600 [26840] kgf	24600 [26840] kgf
		54230 [59170] lbf	54230 [59170] lbf
	ISO	280.5 [306.0] kN	280.5 [306.0] kN
		28600 [31200] kgf	28600 [31200] kgf
		63050 [68780] lbf	63050 [68780] lbf
Arm crowd force	SAE	278.5 [303.8] kN	225.6 [246.1] kN
		28400 [30980] kgf	23000 [25090] kgf
		62610 [68300] lbf	50710 [55310] lbf
	ISO	291.3 [317.7] kN	235.4 [256.7] kN
		29700 [32400] kgf	24000 [26180] kgf
		65480 [71430] lbf	52910 [57720] lbf

[] : Power boost

6) HX520 L

· 9.00 m (29' 6") BOOM



480F2SP05

Description		6.00 m (19' 8") Arm
Max digging reach	A	16180 mm (53' 1")
Max digging reach on ground	A'	16010 mm (52' 6")
Max digging depth	B	11870 mm (38' 11")
Max digging depth (8ft level)	B'	11770 mm (38' 7")
Max vertical wall digging depth	C	8360 mm (27' 5")
Max digging height	D	12590 mm (41' 4")
Max dumping height	E	9410 mm (30' 10")
Min swing radius	F	6140 mm (20' 2")
Bucket digging force	SAE	184.4 kN
		18800 kgf
		41450 lbf
	ISO	213.8 kN
		21800 kgf
		48060 lbf
Arm crowd force	SAE	103.0 kN
		10500 kgf
		23150 lbf
	ISO	105.9 kN
		10800 kgf
		23810 lbf

4. WEIGHT

1) HX480 L

Item		HX480 L	
		kg	lb
Upperstructure assembly		20120	44360
Main frame weld assembly		4640	10230
Engine assembly		1075	2370
Main pump assembly		190	420
Main control valve assembly		420	930
Swing motor assembly		230	510
Hydraulic oil tank assembly		450	990
Fuel tank assembly		270	600
Counterweight	6.55 m, 7.06 m boom	9200	20280
	9.0 m boom	10700	23590
Cab assembly		490	1080
Lower chassis assembly		19000	41890
Track frame weld assembly		7060	15570
Swing bearing		720	1590
Travel motor assembly		440	970
Turning joint		50	110
Track recoil spring		310	680
Idler		250	550
Sprocket		95	210
Carrier roller		40	90
Track roller		87	190
Track-chain assembly (600 mm standard triple grouser shoe)		2700	5950
Front attachment assembly (7.06 m boom, 3.38 m arm, 2.20 m³ SAE heaped bucket)		10380	22880
7.06 m boom assembly		3570	7870
6.55 m boom assembly		3560	7850
9.0 m boom assembly		4310	9500
3.38 m arm assembly		1820	4010
2.20 m³ SAE heaped bucket		2030	4480
Boom cylinder assembly		870	1920
Arm cylinder assembly		600	1320
Bucket cylinder assembly		360	790
Bucket control linkage total		185	410

2) HX520 L

Item		HX520 L	
		kg	lb
Upperstructure assembly		21180	46690
Main frame weld assembly		4640	10230
Engine assembly		1075	2370
Main pump assembly		190	420
Main control valve assembly		420	930
Swing motor assembly		230	510
Hydraulic oil tank assembly		450	990
Fuel tank assembly		270	600
Counterweight	6.55 m, 7.06 m boom	10200	22490
	9.0 m boom	10700	23590
Cab assembly		490	1080
Lower chassis assembly		20800	45860
Lower track frame		2130	4700
Center frame support		8070	17790
Swing bearing		720	1590
Travel motor assembly		440	970
Turning joint		50	110
Track recoil spring		310	680
Idler		250	550
Sprocket		95	210
Carrier roller		40	90
Track roller		87	190
Track-chain assembly (600 mm standard triple grouser shoe)		2700	5850
Front attachment assembly (7.06 m boom, 3.38 m arm, 2.20 m³ SAE heaped bucket)		10420	22970
7.06 m boom assembly		3570	7870
6.55 m boom assembly		3560	7850
9.0 m boom assembly		4310	9500
3.38 m arm assembly		1820	4010
2.20 m³ SAE heaped bucket		2030	4480
Boom cylinder assembly		870	1920
Arm cylinder assembly		600	1320
Bucket cylinder assembly		400	880
Bucket control linkage total		185	410

5. LIFTING CAPACITIES

1) HX480 L

(1) 6.55 m (21' 6") boom, 2.40 m (7' 10") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 9,200 kg (20,280 lb) counterweight.

·  : Rating over-front

·  : Rating over-side or 360 degree

Load point height		Load radius								At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		Capacity		Reach
												m (ft)
6.0 m (19.6 ft)	kg lb					*13100 *28880	*13100 *28880	*12540 *27640	9840 21700	10830 23890	6430 14190	9.71 31.72
4.5 m (14.7 ft)	kg lb			*18500 *40800	*18500 *40800	*15010 *33100	13670 30150	*13400 *29530	9460 20850	9840 21690	5750 12680	10.16 33.19
3.0 m (9.8 ft)	kg lb					*17090 *37680	12800 28230	*14450 *31850	9010 19860	9410 20740	5440 11980	10.33 33.74
1.5 m (4.9 ft)	kg lb					*18620 *41060	12140 26750	15190 33480	8620 19010	9430 20790	5410 11940	10.24 33.44
Ground Line	kg lb			*24870 *54820	18570 40940	*19220 *42370	11770 25950	14910 32860	8380 18470	9930 21900	5700 12570	9.88 32.28
-1.5 m (-4.9 ft)	kg lb			*23780 *52420	18600 41000	*18850 *41560	11680 25750	14840 32710	8320 18340	11150 24570	6430 14180	9.21 30.1
-3.0 m (-9.8 ft)	kg lb	*27210 *59990	*27210 *59990	*21680 *47800	18870 41590	*17410 *38370	11840 26090			*11320 *24960	8010 17650	8.15 26.61
-4.5 m (-14.7 ft)	kg lb			*18000 *39690	*18000 *39690					*10800 *23810	9470 20870	7.4 24.19

- Note
1. Lifting capacity is based on ISO 10567.
 2. Load point is the end pin point of front attachment.
 3. Lifting capacity does not exceed 75% of tipping load or 87% of hydraulic capacity.
 4. * indicates the 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.

(2) 6.55 m (21' 6") boom, 2.90 m (9' 6") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 9,200 kg (20,280 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius										At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		9.0 m (29.4 ft)		Capacity		Reach
														m (ft)
7.5 m (24.5 ft)	kg							*11560	10150			*8700	7060	9.39
	lb							*25480	22390			*19180	15560	30.67
6.0 m (19.6 ft)	kg							*12010	9940			*8690	5950	10.12
	lb							*26480	21910			*19170	13120	33.06
4.5 m (14.7 ft)	kg			*17020	*17020	*14310	13870	*12990	9520			*8820	5340	10.55
	lb			*37530	*37530	*31560	30580	*28630	20990			*19440	11770	34.45
3.0 m (9.8 ft)	kg			*21620	20330	*16560	12950	*14170	9040	11500	6600	8810	5040	10.71
	lb			*47670	44820	*36500	28550	*31230	19920	25350	14550	19420	11110	34.99
1.5 m (4.9 ft)	kg			*24550	18980	*18370	12190	15180	8600	11240	6370	8800	5000	10.62
	lb			*54130	41850	*40490	26860	33470	18960	24780	14040	19410	11020	34.71
Ground Line	kg			*25300	18440	*19310	11710	14830	8290			9220	5230	10.28
	lb			*55770	40660	*42560	25830	32700	18280			20330	11540	33.59
-1.5 m (-4.9 ft)	kg	*23710	*23710	*24660	18350	*19280	11530	14680	8160			10230	5840	9.65
	lb	*52280	*52280	*54370	40450	*42510	25420	32370	17990			22550	12870	31.52
-3.0 m (-9.8 ft)	kg	*29990	*29990	*22950	18540	*18250	11600	*14760	8250			*11610	7100	8.65
	lb	*66110	*66110	*50590	40860	*40230	25570	*32540	18180			*25590	15650	28.26
-4.5 m (-14.7 ft)	kg	*25460	*25460	*19850	19020	*15750	11960					*10980	9450	7.36
	lb	*56130	*56130	*43770	41930	*34730	26380					*24210	20830	24.05

(3) 7.06 m (23' 2") boom, 3.38 m (11' 1") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 9,200 kg (20,280 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius										At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		9.0 m (29.4 ft)		Capacity		Reach
														m (ft)
6.0 m (19.6 ft)	kg							*11510	9900	*11340	7020	*7750	4930	11.05
	lb							*25370	21820	*25010	15480	*17090	10870	36.08
4.5 m (14.7 ft)	kg					*14080	13730	*12700	9410	11690	6770	*7880	4450	11.43
	lb					*31040	30270	*28000	20740	25770	14910	*17370	9820	37.34
3.0 m (9.8 ft)	kg			*21750	19990	*16510	12740	*14050	8870	11350	6460	7570	4210	11.58
	lb			*47940	44070	*36390	28080	*30970	19550	25020	14250	16680	9280	37.83
1.5 m (4.9 ft)	kg			*24850	18580	*18470	11920	14950	8390	11030	6180	7540	4160	11.5
	lb			*54780	40950	*40730	26270	32950	18490	24320	13620	16630	9180	37.57
Ground Line	kg			*25740	18010	*19570	11410	14550	8040	10790	5960	7830	4320	11.19
	lb			*56750	39710	*43150	25150	32070	17720	23800	13140	17270	9530	36.55
-1.5 m (-4.9 ft)	kg	*19090	*19090	*25340	17890	*19780	11180	14330	7850	10680	5860	8530	4740	10.62
	lb	*42080	*42080	*55870	39430	*43600	24640	31600	17310	23540	12910	18800	10450	34.69
-3.0 m (-9.8 ft)	kg	*25270	*25270	*24050	18010	*19150	11180	14320	7840			9890	5580	9.74
	lb	*55720	*55720	*53020	39710	*42220	24650	31570	17280			21810	12290	31.82
-4.5 m (-14.7 ft)	kg	*28240	*28240	*21780	18370	*17570	11390	*14330	8040			*11250	7290	8.43
	lb	*62250	*62250	*48020	40490	*38740	25120	*31590	17720			*24800	16080	27.54
-6.0 m (-19.6 ft)	kg			*18000								*10910	8780	7.61
	lb			*39690								*24060	19360	24.85

(4) 7.06 m (23' 2") boom, 2.40 m (7' 10") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 9,200 kg (20,280 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius										At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		9.0 m (29.4 ft)		Capacity		Reach
														m (ft)
7.5 m (24.5 ft)	kg							*11920	9980			*10790	6730	9.53
	lb							*26280	22010			*23790	14850	31.14
6.0 m (19.6 ft)	kg					*13370	*13370	*12470	9690			9730	5700	10.26
	lb					*29480	*29480	*27490	21370			21450	12560	33.5
4.5 m (14.7 ft)	kg					*15530	13250	*13530	9230			8903	5120	10.68
	lb					*34250	29220	*29830	20340			19630	11290	34.88
3.0 m (9.8 ft)	kg					*17700	12330	*14680	8740	11330	6460	8540	4850	10.84
	lb					*39020	27200	*32370	19260	24980	14250	18820	10690	35.4
1.5 m (4.9 ft)	kg					*19140	11690	14860	8330	11080	6240	8550	4820	10.75
	lb					*42190	25780	32760	18370	24430	13760	18840	10640	35.12
Ground Line	kg					*19600	11380	14580	8090	10940	6110	8960	5060	10.41
	lb					*43210	25090	32140	17830	24120	13470	19750	11160	34.02
-1.5 m (-4.9 ft)	kg			*23820	18210	*19210	11320	14500	8020			9930	5650	9.79
	lb			*52520	40150	*42360	24960	31960	17680			21890	12460	31.98
-3.0 m (-9.8 ft)	kg	*26660	*26660	*22010	18460	*17980	11470	14660	8160			*11270	6860	8.81
	lb	*58780	*58780	*48530	40690	*39630	25290	32320	17980			*24840	15120	28.78
-4.5 m (-14.7 ft)	kg			*19030	18970	*15480	11890					*10630	8730	7.71
	lb			*41950	41820	*34120	26210					*23430	19240	25.19

(5) 7.06 m (23' 2") boom, 2.90 m (9' 6") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 9,200 kg (20,280 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius										At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		9.0 m (29.4 ft)		Capacity		Reach
														m (ft)
7.5 m (24.5 ft)	kg							*11300	10110			*9200	6210	9.96
	lb							*24920	22290			*20290	13690	32.54
6.0 m (19.6 ft)	kg							*12000	9780			9110	5290	10.65
	lb							*26450	21560			20090	11660	34.78
4.5 m (14.7 ft)	kg			*18460	*18460	*14840	13460	*13150	9290	11630	6710	8370	4760	11.05
	lb			*40690	*40690	*32720	29680	*28980	20480	25630	14800	18440	10500	36.09
3.0 m (9.8 ft)	kg			*23200	19320	*17170	12480	*14420	8760	11310	6430	8020	4500	11.2
	lb			*51150	42600	*37860	27520	*31790	19320	24930	14170	17680	9920	36.6
1.5 m (4.9 ft)	kg			*21570	18200	*18920	11730	14850	8310	11020	6170	8010	4460	11.12
	lb			*47550	40110	*41710	25860	32750	18320	24290	13590	17650	9830	36.33
Ground Line	kg			*24530	17880	*19730	11310	14500	8000	10820	5990	8350	4650	10.8
	lb			*54090	39420	*43500	24920	31970	17640	23850	13200	18400	10250	35.27
-1.5 m (-4.9 ft)	kg	*19550	*19550	*24880	17880	*19650	11160	14350	7870			9170	5140	10.2
	lb	*43100	*43100	*54840	39430	*43320	24600	31640	17350			20210	11340	33.32
-3.0 m (-9.8 ft)	kg	*27720	*27720	*23290	18090	*18730	11240	14410	7930			10790	6140	9.28
	lb	*61120	*61120	*51340	39890	*41300	24770	31780	17470			23790	13530	30.31
-4.5 m (-14.7 ft)	kg	*26110	*26110	*20660	18540	*16750	11550					*10990	8290	7.87
	lb	*57560	*57560	*45550	40870	*36930	25460					*24220	18270	25.72

(6) 7.06 m (23' 2") boom, 4.00 m (13' 1") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 9,200 kg (20,280 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius														At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		9.0 m (29.4 ft)		10.5 m (34.3 ft)		Capacity		Reach
																		m (ft)
7.5 m (24.5 ft)	kg											*10200	7350			*7160	5140	11.03
	lb											*22500	16210			*15780	11340	36.02
6.0 m (19.6 ft)	kg											*10730	7180			*7190	4460	11.64
	lb											*23660	15830			*15840	9820	38.02
4.5 m (14.7 ft)	kg									*11990	9630	*11430	6900	8920	5040	7240	4040	12
	lb									*26430	21230	*25200	15200	19650	11100	15970	8900	39.21
3.0 m (9.8 ft)	kg					*19780	*19780	*15510	13090	*13450	9050	11470	6560	8720	4860	6960	3820	12.14
	lb					*43610	*43610	*34200	28870	*29650	19960	25280	14460	19220	10710	15340	8420	39.67
1.5 m (4.9 ft)	kg					*23740	19050	*17790	12160	*14820	8510	11110	6230	8520	4680	6930	3766	12.07
	lb					*52340	42000	*39230	26810	*32660	18770	24490	13740	18780	10310	15270	8303	39.43
Ground Line	kg			*13800	*13800	*25590	18130	*19290	11510	14620	8090	10810	5970	8360	4530	7154	3886	11.77
	lb			*30430	*30430	*56410	39970	*42530	25390	32230	17840	23840	13160	18440	9990	15772	8568	38.46
-1.5 m (-4.9 ft)	kg	*14500	*14500	*17930	*17930	*25840	17790	*19900	11170	14320	7830	10630	5810			7706	4217	11.24
	lb	*31970	*31970	*39520	*39520	*56971	39230	*43860	24620	31580	17270	23430	12800			16990	9298	36.73
-3.0 m (-9.8 ft)	kg	*18590	*18590	*22750	*22750	*25020	17790	*19650	11070	14220	7740	10590	5770			8768	4871	10.43
	lb	*40980	*40980	*50160	*50160	*55170	39230	*43320	24400	31350	17070	23350	12720			19329	10738	34.06
-4.5 m (-14.7 ft)	kg			*28640	*28640	*23220	18040	*18520	11190	14330	7830					10836	6139	9.24
	lb			*63150	*63150	*51200	39780	*40830	24660	31580	17270					23890	13534	30.17
-6.0 m (-19.6 ft)	kg			*26350	*26350	*20150	18570	*16170	11560							*10846	8506	7.73
	lb			*58080	*58080	*44430	40950	*35660	25470							*23910	18753	25.26

(7) 9.00 m (29' 6") boom, 6.00 m (19' 8") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10,200 kg (22,490 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius												At max. reach		
		3.0 m (9.8 ft)		5.0 m (16.3 ft)		7.0 m (22.9 ft)		9.0 m (29.4 ft)		11.0 m (35.9 ft)		13.0 m (42.5 ft)		Capacity		Reach
																m (ft)
8.0 m (26.1 ft)	kg											*5500	3770	*4660	2920	14.78
	lb											*12130	8310	*10280	6440	48.27
6.0 m (19.6 ft)	kg									*8570	5400	6630	3620	*4700	2460	15.40
	lb									*18890	11910	14610	7980	*10370	5430	50.32
4.0 m (13.1 ft)	kg							*10020	7380	8790	4980	6370	3380	4500	2180	15.72
	lb							*22080	16280	19380	10980	14050	7460	9920	4810	51.37
2.0 m (6.5 ft)	kg			*19230	16740	*13910	10040	*11610	6620	8300	4530	6090	3120	4350	2040	15.76
	lb			*42390	36900	*30660	22120	*25600	14580	18300	9990	13430	6880	9590	4500	51.47
Ground Line	kg	*8600	*8600	*16340	14820	*16100	8930	11010	5960	7870	4130	5840	2880	4380	2030	15.50
	lb	*18960	*18960	*36020	32670	*35480	19690	24270	13140	17340	9100	12870	6360	9660	4480	50.64
-2.0 m (-6.5 ft)	kg	*10720	*10720	*16220	14070	15820	8280	10510	5510	7550	3840	5660	2710	4630	2170	14.95
	lb	*23630	*23630	*35750	31010	34870	18260	23160	12140	16640	8460	12470	5980	10210	4780	48.83
-4.0 m (-13.1 ft)	kg	*13060	*13060	*18160	13920	15510	8012	10250	5280	7380	3680			5170	2500	14.06
	lb	*28800	*28800	*40040	30690	34190	17660	22600	11640	16280	8120			11390	5520	45.92
-6.0 m (-19.6 ft)	kg	*15680	*15680	*21300	14130	15540	8037	10230	5260	7400	3700			6120	3160	12.74
	lb	*34570	*34570	*46950	31160	34250	17720	22560	11600	16320	8170			13690	6970	41.61
-8.0 m (-26.1 ft)	kg	*18670	*18670	*20410	14660	*15830	8330	10490	5490					*7810	4550	10.82
	lb	*41160	*41160	*45000	32330	*34890	18370	23120	12100					*17230	10020	35.33
-10.0 m (-32.7 ft)	kg			*16900	15630	*13170	9000							*9870	6980	8.72
	lb			*37270	34450	*29030	19840							*21760	15400	28.48

2) HX520 L

(1) 6.55 m (21' 6") boom, 2.40 m (7' 10") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10,200 kg (22,490 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius								At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		Capacity		Reach
												m (ft)
6.0 m (19.6 ft)	kg lb					*13290 *29290	*13290 *29290	*12630 25560	11600	*11260 *24840	7540 16610	9.80 32.02
4.5 m (14.7 ft)	kg lb			*19010 *41910	*19010 *41910	*15250 *33630	*15250 *33630	*13520 *29820	11190 24660	10630 23430	6840 15070	10.22 33.39
3.0 m (9.8 ft)	kg lb					*17320 *38170	15170 33450	*14580 *32140	10730 23650	10240 22560	6540 14410	10.36 33.86
1.5 m (4.9 ft)	kg lb					*18760 *41370	14520 32000	*15410 *33970	10350 22810	10320 22740	6560 14460	10.25 33.48
Ground Line	kg lb			*24850 *54790	22470 49530	*19270 *42470	14170 31240	*15740 *34690	10110 22290	10920 24080	6940 15310	9.86 32.22
-1.5 m (-4.9 ft)	kg lb	*26490 *58390	*26490 *58390	*23670 *52180	22520 49650	*18800 *41440	14100 31090	*15300 *33740	10070 22210	*11680 *25740	7850 17300	9.17 29.95
-3.0 m (-9.8 ft)	kg lb	*26910 *59330	*26910 *59330	*21450 *47290	*21450 *47290	*17220 *37970	14290 31510			*11150 *24580	9790 21590	8.05 26.31
-4.5 m (-14.7 ft)	kg lb			*17540 *38660	*17540 *38660					*10720 *23640	*10720 *23640	7.49 24.46

- Note
1. Lifting capacity is based on ISO 10567.
 2. Load point is the end pin point of front attachment.
 3. Lifting capacity does not exceed 75% of tipping load or 87% of hydraulic capacity.
 4. *indicates the 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.

(2) 6.55 m (21' 6") boom, 2.90 m (9' 6") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10,200 kg (22,490 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius										At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		9.0 m (29.4 ft)		Capacity		Reach
														m (ft)
7.5 m (24.5 ft)	kg							*11640	*11640			*8710	8100	9.54
	lb							*25650	*25650			*19200	17850	31.17
6.0 m (19.6 ft)	kg							*12110	11690			*8690	6970	10.24
	lb							*26700	25770			*19170	15360	33.44
4.5 m (14.7 ft)	kg			*17530	*17530	*14570	*14570	*13130	11250			*8810	6340	10.63
	lb			*38640	*38640	*32110	*32110	*28940	24800			*19410	13990	34.73
3.0 m (9.8 ft)	kg			*22060	*22060	*16800	15320	*14310	10750	12550	7950	*9040	6060	10.77
	lb			*48640	*48640	*37040	33770	*31550	23710	27660	17530	*19930	13370	35.18
1.5 m (4.9 ft)	kg			*24760	22820	*18540	14560	*15320	10320	12290	7720	*9420	6070	10.66
	lb			*54590	50310	*40880	32100	*33770	22750	27100	17010	*20770	13380	34.82
Ground Line	kg			*25340	22320	*19390	14110	*15870	10020			*9990	6380	10.29
	lb			*55860	49210	*42740	31100	*34980	22090			*22030	14070	33.62
-1.5 m (-4.9 ft)	kg	*24530	*24530	*24590	22260	*19270	13950	*15750	9910			*10870	7120	9.63
	lb	*54080	*54080	*54220	49070	*42480	30750	*34720	21840			*23960	15700	31.47
-3.0 m (-9.8 ft)	kg	*29690	*29690	*22760	22480	*18120	14040	*14610	10020			*11430	8670	8.59
	lb	*65460	*65460	*50180	49560	*39940	30960	*32200	22100			*25200	19120	28.07
-4.5 m (-14.7 ft)	kg			*19480	*19480	*15400	14460					*10840	*10840	7.50
	lb			*42950	*42950	*33960	31880					*23900	*23900	24.50

(3) 7.06 m (23' 2") boom, 2.40 m (7' 10") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10,200 kg (22,490 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius										At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		9.0 m (29.4 ft)		Capacity		Reach
														m (ft)
7.5 m (24.5 ft)	kg							*11960	11760			*10860	7810	9.66
	lb							*26360	25920			*23940	17210	31.56
6.0 m (19.6 ft)	kg					*13590	*13590	*12590	11430			10460	6730	10.35
	lb					*29970	*29970	*27750	25200			23050	14840	33.80
4.5 m (14.7 ft)	kg					*15800	15620	*13670	10950	*12580	8060	9650	6150	10.74
	lb					*34820	34430	*30150	24130	*27740	17770	21280	13550	35.07
3.0 m (9.8 ft)	kg					*17920	14690	*14820	10450	12380	7810	9320	5880	10.87
	lb					*39510	32390	*32680	23030	27290	17210	20540	12970	35.52
1.5 m (4.9 ft)	kg					*19270	14070	*15700	10050	12140	7590	9380	5900	10.76
	lb					*42480	31010	*34600	22150	26760	16730	20670	13000	35.16
Ground Line	kg					*19640	13780	15940	9820			9870	6210	10.40
	lb					*43300	30370	35140	21640			21760	13700	33.97
-1.5 m (-4.9 ft)	kg			*23730	22120	*19170	13740	*15770	9760			10980	6940	9.75
	lb			*52320	48760	*42270	30290	*34760	21530			24210	15300	31.85
-3.0 m (-9.8 ft)	kg	*26500	*26500	*21830	*21830	*17840	13910	*14540	9930			*11140	8420	8.74
	lb	*58420	*58420	*48130	*48130	*39330	30680	*32060	21900			*24560	18560	28.54
-4.5 m (-14.7 ft)	kg			*18680	*18680	*15140	14380					*10560	10260	7.80
	lb			*41180	*41180	*33380	31710					*23280	22620	25.47

(4) 7.06 m (23' 2") boom, 2.90 m (9' 6") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10,200 kg (22,490 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius										At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		9.0 m (29.4 ft)		Capacity		Reach
														m (ft)
7.5 m (24.5 ft)	kg							*11360	*11360			*9210	7190	10.11
	lb							*25050	*25050			*20310	15860	33.03
6.0 m (19.6 ft)	kg							*12120	11520			*9220	6250	10.76
	lb							*26730	25400			*20340	13770	35.15
4.5 m (14.7 ft)	kg			*19010	*19010	*15110	*15110	*13300	11010	*12330	8060	9050	5720	11.13
	lb			*41900	*41900	*33310	*33310	*29320	24270	*27180	17770	19940	12600	36.37
3.0 m (9.8 ft)	kg			*23620	23090	*17420	14840	*14570	10470	12350	7770	8730	5470	11.26
	lb			*52060	50900	*38400	32710	*32120	23090	27230	17130	19250	12050	36.80
1.5 m (4.9 ft)	kg			*21570	*21570	*19080	14100	*15610	10020	12070	7510	8770	5460	11.16
	lb			*47560	*47560	*42070	31080	*34410	22090	26600	16560	19320	12040	36.45
Ground Line	kg			*25090	21760	*19800	13690	15860	9730	11880	7340	9180	5720	10.81
	lb			*55310	47970	*43660	30190	34960	21440	26180	16170	20230	12610	35.32
-1.5 m (-4.9 ft)	kg	*20350	*20350	*24810	21780	*19640	13570	15730	9610			10110	6330	10.19
	lb	*44860	*44860	*54690	48020	*43300	29910	34670	21180			22280	13950	33.30
-3.0 m (-9.8 ft)	kg	*28610	*28610	*23130	22020	*18630	13670	*15310	9690			*11360	7540	9.23
	lb	*63060	*63060	*50990	48550	*41080	30140	*33750	21360			*25040	16620	30.17
-4.5 m (-14.7 ft)	kg			*20370	*20370	*16510	14020					*10730	10170	7.79
	lb			*44910	*44910	*36390	30910					*23650	22430	25.43

(5) 7.06 m (23' 2") boom, 3.38 m (11' 1") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10,200 kg (22,490 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius										At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		9.0 m (29.4 ft)		Capacity		Reach
														m (ft)
6.0 m (19.6 ft)	kg							*11640	*11640	*11410	8380	*7750	5820	11.18
	lb							*25650	*25650	*25160	18480	*17080	12840	36.53
4.5 m (14.7 ft)	kg			*17410	*17410	*14350	*14350	*12860	11130	*12030	8110	*7860	5340	11.54
	lb			*38390	*38390	*31640	*31640	*28360	24540	*26530	17890	*17330	11780	37.70
3.0 m (9.8 ft)	kg			*22210	*22210	*16770	15090	*14210	10580	12390	7800	*8060	5120	11.67
	lb			*48960	*48960	*36960	33280	*31330	23320	27320	17200	*17760	11280	38.11
1.5 m (4.9 ft)	kg			*25070	22400	*18660	14280	*15370	10100	12080	7520	8240	5100	11.57
	lb			*55270	49380	*41150	31490	*33880	22260	26630	16570	18160	11250	37.78
Ground Line	kg			*25800	21880	*19670	13790	15900	9760	11850	7310	8590	5320	11.23
	lb			*56880	48230	*43370	30400	35040	21510	26120	16110	18930	11730	36.69
-1.5 m (-4.9 ft)	kg	*19680	*19680	*25300	21780	*19800	13580	15700	9580	11750	7210	9370	5830	10.64
	lb	*43390	*43390	*55780	48010	*43640	29940	34620	21130	25890	15900	20660	12860	34.77
-3.0 m (-9.8 ft)	kg	*25950	*25950	*23920	21930	*19080	13600	15710	9590			*10510	6840	9.74
	lb	*57200	*57200	*52740	48350	*42069	29990	34630	21140			*23180	15080	31.82
-4.5 m (-14.7 ft)	kg	*27870	*27870	*21540	*21540	*17390	13850					*10990	8910	8.39
	lb	*61430	*61430	*47480	*47480	*38330	30530					*24230	19640	27.41

(6) 7.06 m (23' 2") boom, 4.00 m (13' 1") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10,200 kg (22,490 lb) counterweight.

·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius														At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.7 ft)		6.0 m (19.6 ft)		7.5 m (24.5 ft)		9.0 m (29.4 ft)		10.5 m (34.3 ft)		Capacity		Reach
																		m (ft)
7.5 m (24.5 ft)	kg											*10410	8730			*7170	6000	11.19
	lb											*22950	19250			*15800	13240	36.54
6.0 m (19.6 ft)	kg											*10810	8540			*7190	5300	11.77
	lb											*23840	18830			*15850	11680	38.45
4.5 m (14.7 ft)	kg									*12150	11350	*11540	8240	*9510	6140	*7280	4890	12.11
	lb									*26800	25030	*25430	18170	*20960	13550	*16050	10770	39.55
3.0 m (9.8 ft)	kg					*20300	*20300	*15800	15460	*13620	10760	*12390	7900	9570	5960	*7450	4680	12.23
	lb					*44750	*44750	*34820	34070	*30040	23730	*27310	17410	21110	13140	*16430	10310	39.94
1.5 m (4.9 ft)	kg					*24060	22850	*18020	14520	*14970	10220	12150	7570	9380	5780	7590	4650	12.13
	lb					*53050	50390	*39730	32020	*33000	22530	26780	16690	20670	12730	16720	10260	39.63
Ground Line	kg			*14190	*14190	*25720	21980	*19430	13890	*15930	9810	11860	7310	9230	5640	7860	4820	11.82
	lb			*31290	*31290	*56710	48450	*42840	30620	*35120	21620	26150	16120	20340	12430	17340	10630	38.60
-1.5 m (-4.9 ft)	kg	*14900	*14900	*18380	*18380	*25860	21670	*19950	13560	15680	9560	11690	7160			8490	5240	11.26
	lb	*32850	*32850	*40520	*40520	*57000	47780	*43980	29900	34570	21070	25770	15770			18730	11550	36.78
-3.0 m (-9.8 ft)	kg	*19020	*19020	*23290	*23290	*24940	21700	*19620	13480	15600	9480	11670	7140			*9460	6020	10.42
	lb	*41940	*41940	*51340	*51340	*54990	47830	*43250	29720	34390	20910	25720	15730			*20850	13280	34.05
-4.5 m (-14.7 ft)	kg			*29320	*29320	*23030	21980	*18390	13630	*15130	9600					*10910	7550	9.20
	lb			*64640	*64640	*50780	48470	*40550	30040	*33350	21160					*24050	16650	30.05
-6.0 m (-19.6 ft)	kg					*19800	*19800	*15870	14040							*10660	9810	7.93
	lb					*43650	*43650	*35000	30950							*23500	21620	25.91

(7) 9.00 m (29' 6") boom, 6.00 m (19' 8") arm equipped with 2.20 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10,200 kg (22,490 lb) counterweight.

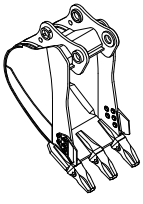
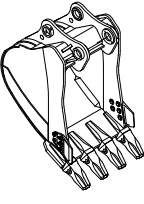
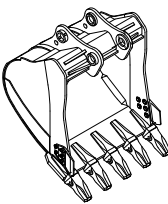
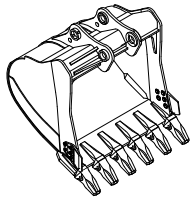
·  : Rating over-front ·  : Rating over-side or 360 degree

Load point height		Load radius												At max. reach		
		3.0 m (9.8 ft)		5.0 m (16.3 ft)		7.0 m (22.9 ft)		9.0 m (29.4 ft)		11.0 m (35.9 ft)		13.0 m (42.5 ft)		Capacity		Reach
																m (ft)
8.0 m (26.1 ft)	kg											*5650	4340	*4660	3370	14.83
	lb											*12460	9560	*10280	7430	48.46
6.0 m (19.6 ft)	kg									*8630	6090	6910	4180	*4710	2900	15.44
	lb									*19020	13410	15230	9200	*10380	6390	50.43
4.0 m (13.1 ft)	kg							*10140	8260	9120	5650	6650	3930	4720	2620	15.74
	lb							*22350	18200	20100	12460	14660	8670	10410	5770	51.40
2.0 m (6.5 ft)	kg			*19580	18830	*14100	11260	*11720	7480	8630	5200	6370	3670	4580	2490	15.75
	lb			*43170	41510	*31090	24830	*25850	16500	19030	11470	14040	8090	10100	5480	51.44
Ground Line	kg	*8750	*8750	*16190	*16190	*16220	10170	11440	6830	8200	4800	6120	3430	4640	2500	15.47
	lb	*19290	*19290	*35700	*35700	*35760	22420	25210	15060	18090	10590	13490	7570	10220	5510	50.54
-2.0 m (-6.5 ft)	kg	*10880	*10880	*16310	16250	16450	9540	10950	6390	7900	4520	5950	3270	4910	2670	14.90
	lb	*24000	*24000	*35960	35830	36270	21030	24140	14090	17410	9950	13110	7210	10830	5880	48.66
-4.0 m (-13.1 ft)	kg	*13250	*13250	*18360	16130	16170	9290	10710	6170	7740	4370			5500	3060	13.97
	lb	*29200	*29200	*40470	35570	35650	20480	23620	13610	17070	9640			12120	6740	45.64
-6.0 m (-19.6 ft)	kg	*15890	*15890	*21580	16380	16220	9340	10720	6180	7780	4410			*6510	3820	12.62
	lb	*35030	*35030	*47580	36110	35760	20580	23620	13610	17150	9720			*14360	8420	41.22
-8.0 m (-26.1 ft)	kg	*18910	*18910	*20210	16950	*15890	9660	10990	6430					*7990	5450	10.63
	lb	*41690	*41690	*44550	37370	*34580	21290	24230	14170					*17610	12020	34.72
-10.0 m (-32.7 ft)	kg			*16560	*16560	*12870	10380							*9870	7950	8.72
	lb			*36500	*36500	*28380	22880							*21760	17520	28.48

6. BUCKET SELECTION GUIDE

1) HX480 L

(1) GENERAL BUCKET

			
1.00 m³ SAE heaped bucket	1.38 m³ SAE heaped bucket	2.20 m³, 2.79 m³ SAE heaped bucket	3.00 m³ SAE heaped bucket

Capacity		Width	Weight	Recommendation						
				7.06 m (23' 2") boom				6.55 m (21' 6") boom		9.00 m (29' 6") boom
SAE heaped	CECE heaped			2.4 m arm (7' 10")	2.9 m arm (9' 6")	3.38 m arm (11' 1")	4.0 m arm (13' 1")	2.4 m arm (7' 10")	2.9 m arm (9' 6")	6.00 m arm (19' 8")
1.00 m³ (1.31 yd³)	0.90 m³ (1.18 yd³)	1030 mm (41")	1450 kg (3200 lb)	○	○	○	○	○	○	○
1.38 m³ (1.80 yd³)	1.24 m³ (1.62 yd³)	1215 mm (48")	1670 kg (3680 lb)	○	○	○	○	○	○	●
2.20 m³ (2.88 yd³)	1.93 m³ (2.52 yd³)	1685 mm (66")	2030 kg (4480 lb)	○	○	○	◐	○	○	
2.79 m³ (3.65 yd³)	2.47 m³ (3.23 yd³)	1865 mm (73")	2300 kg (5070 lb)	◐	◐	●	●	○	○	
3.00 m³ (3.92 yd³)	2.70 m³ (3.53 yd³)	1985 mm (78")	2440 kg (5380 lb)	●	●	●	●	○	○	

○ 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

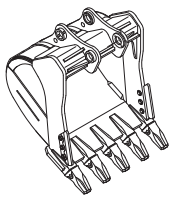
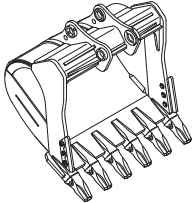
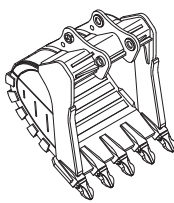
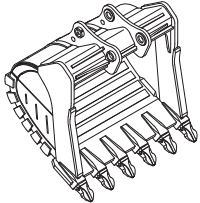
※ These recommendations are for general conditions and average use.

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) HEAVY DUTY AND ROCK-HEAVY DUTY BUCKET

			
◆ 2.20 m³ SAE ◆ 2.43 m³ SAE ◆ 2.79 m³ SAE heaped bucket	◆ 3.20 m³ SAE heaped bucket	◆ 2.20 m³ SAE ◆ 2.43 m³ SAE ◆ 2.79 m³ SAE heaped bucket	◆ 3.20 m³ SAE heaped bucket

Capacity		With	Weight	Recommendation						9.00 m (29' 6") boom
				7.06 m (23' 2") boom				6.55 m (21' 5") boom		6.00 m arm (19' 8")
SAE heaped	CECE heaped			2.4 m arm (7' 10")	2.9 m arm (9' 6")	3.38 m arm (11' 1")	4.0 m arm (13' 1")	2.4 m arm (7' 10")	2.9 m arm (9' 6")	
◆2.20 m³ (2.88 yd³)	1.93 m³ (2.52 yd³)	1685 mm (66")	2320 kg (5110 lb)	○	○	◉	◉	○	○	
◆2.43 m³ (3.18 yd³)	2.11 m³ (2.76 yd³)	1830 mm (72")	2450 kg (5400 lb)	◉	◉	◉	●	○	○	
◆2.79 m³ (3.65 yd³)	2.47 m³ (3.23 yd³)	1865 mm (73")	2630 kg (5800 lb)	◉	●	●	●	○	○	
◆3.20 m³ (4.19 yd³)	2.82 m³ (3.69 yd³)	2075 mm (82")	2870 kg (6330 lb)	●	●	●		◉	◉	
◆2.20 m³ (2.88 yd³)	1.93 m³ (2.52 yd³)	1685 mm (66")	2610 kg (5750 lb)	○	◉	◉		○	○	
◆2.43 m³ (3.18 yd³)	2.11 m³ (2.76 yd³)	1830 mm (72")	2730 kg (6020 lb)	◉	◉	●		○	○	
◆2.79 m³ (3.65 yd³)	2.47 m³ (3.23 yd³)	1865 mm (73")	2950 kg (6500 lb)	●	●	●		○	◉	
◆3.20 m³ (4.19 yd³)	2.82 m³ (3.69 yd³)	2075 mm (82")	3230 kg (7120 lb)	●	●			◉	◉	

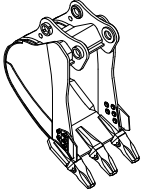
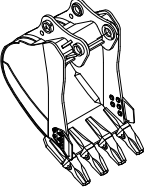
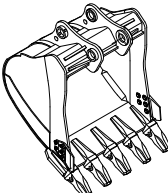
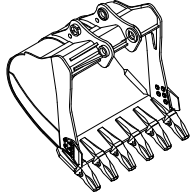
◆ : Heavy duty bucket

◆ : Rock-Heavy duty bucket

○	Applicable for materials with density of 2000 kg/m³ (3370 lb/yd³) or less
●	Applicable for materials with density of 1600 kg/m³ (2700 lb/yd³) or less
●	Applicable for materials with density of 1100 kg/m³ (1850 lb/yd³) or less

2) HX520 L

(1) GENERAL BUCKET

			
1.00 m³ SAE heaped bucket	1.38 m³ SAE heaped bucket	2.20 m³ SAE 2.79 m³ SAE heaped bucket	3.00 m³ SAE heaped bucket

Capacity		Width	Weight	Recommendation						
				7.06 m (23' 2") boom				6.55 m (21' 6") boom		9.00 m (29' 6") boom
				2.4 m arm (7' 10")	2.9 m arm (9' 6")	3.38 m arm (11' 1")	4.0 m arm (13' 1")	2.4 m arm (7' 10")	2.9 m arm (9' 6")	6.00 m arm (19' 8")
1.00 m³ (1.31 yd³)	0.90 m³ (1.18 yd³)	1030 mm (41")	1450 kg (3200 lb)	○	○	○	○	○	○	○
1.38 m³ (1.80 yd³)	1.24 m³ (1.62 yd³)	1215 mm (48")	1670 kg (3680 lb)	○	○	○	○	○	○	●
2.20 m³ (2.88 yd³)	1.93 m³ (2.52 yd³)	1685 mm (66")	2030 kg (4480 lb)	○	○	○	○	○	○	
2.79 m³ (3.65 yd³)	2.47 m³ (3.23 yd³)	1865 mm (73")	2300 kg (5070 lb)	○	◐	◐	◐	○	○	
3.00 m³ (3.92 yd³)	2.70 m³ (3.53 yd³)	1985 mm (78")	2440 kg (5380 lb)	◐	◐	◐	●	○	○	

○ 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

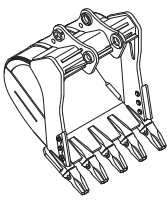
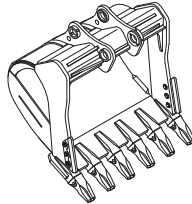
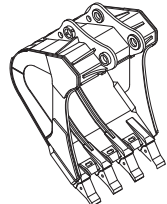
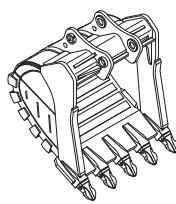
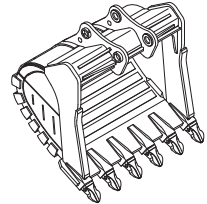
※ These recommendations are for general conditions and average use.

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) HEAVY DUTY AND ROCK-HEAVY DUTY BUCKET

				
◆ 2.20 m ³ SAE ◆ 2.43 m ³ SAE ◆ 2.79 m ³ SAE heaped bucket	◆ 3.20 m ³ SAE heaped bucket	◆ 1.81 m ³ SAE heaped bucket	◆ 2.20 m ³ SAE ◆ 2.43 m ³ SAE ◆ 2.70 m ³ SAE ◆ 2.79 m ³ SAE heaped bucket	◆ 3.00 m ³ SAE ◆ 3.20 m ³ SAE heaped bucket

Capacity		With	Weight	Recommendation						9.00 m (29' 6") boom
				7.06 m (23' 2") boom				6.55 m (21' 5") boom		6.00 m arm (19' 8")
SAE heaped	CECE heaped			2.4 m arm (7' 10")	2.9 m arm (9' 6")	3.38 m arm (11' 1")	4.0 m arm (13' 1")	2.4 m arm (7' 10")	2.9 m arm (9' 6")	
◆2.20 m³ (2.88 yd³)	1.93 m³ (2.52 yd³)	1685 mm (66")	2320 kg (5110 lb)	○	○	○	○	○	○	
◆2.43 m³ (3.18 yd³)	2.11 m³ (2.76 yd³)	1830 mm (72")	2450 kg (5400 lb)	○	○	○	◐	○	○	
◆2.79 m³ (3.65 yd³)	2.47 m³ (3.23 yd³)	1865 mm (73")	2630 kg (5800 lb)	○	◐	◐	●	○	○	
◆3.20 m³ (4.19 yd³)	2.82 m³ (3.69 yd³)	2075 mm (82")	2870 kg (6330 lb)	◐	●	●	●	◐	◐	
◆1.81 m³ (2.37 yd³)	1.50 m³ (1.96 yd³)	1540 mm (61")	2650 kg (5840 lb)	○	○	○		○	○	
◆2.20 m³ (2.88 yd³)	1.93 m³ (2.52 yd³)	1685 mm (66")	2610 kg (5750 lb)	○	○	○		○	○	
◆2.43 m³ (3.18 yd³)	2.11 m³ (2.76 yd³)	1830 mm (72")	2730 kg (6020 lb)	○	○	◐		○	○	
◆2.70 m³ (3.53 yd³)	2.39 m³ (3.13 yd³)	1800 mm (71")	2770 kg (6110 lb)	○	◐	◐		○	○	
◆2.79 m³ (3.65 yd³)	2.47 m³ (3.23 yd³)	1865 mm (73")	2950 kg (6500 lb)	◐	◐	◐		○	◐	
◆3.00 m³ (3.92 yd³)	2.76 m³ (3.61 yd³)	1995 mm (79")	3040 kg (6700 lb)	◐	●	●		◐	◐	
◆3.20 m³ (4.19 yd³)	2.82 m³ (3.69 yd³)	2075 mm (82")	3230 kg (7120 lb)	●	●	●		◐	◐	

◆ : Heavy duty bucket

◆ : Rock-Heavy duty bucket

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

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

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

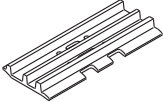
7. UNDERCARRIAGE

1) HX480 L

(1) TRACKS

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

(2) TYPES OF SHOES

Model	Shapes		Triple grouser				
							
HX480 L	Shoe width	mm (in)	600 (24)	700 (28)	750 (30)	800 (32)	900 (36)
	Operating weight	kg (lb)	49500 (109130)	50020 (110280)	50280 (110850)	50540 (111420)	51060 (112570)
	Ground pressure	kgf/cm ² (psi)	0.86 (12.23)	0.75 (10.67)	0.70 (9.95)	0.66 (9.39)	0.59 (8.39)
	Overall width	mm (ft-in)	3340 (10' 11")	3440 (11' 3")	3490 (11' 5")	3540 (11' 7")	3640 (11' 11")
	Shoe width	mm (in)	★600 (24)	★700 (28)	-	-	-
	Operating weight	kg (lb)	49315 (108720)	49835 (109870)	-	-	-
	Ground pressure	kgf/cm ² (psi)	0.86 (12.23)	0.74 (10.52)	-	-	-
	Overall width	mm (ft-in)	3340 (10' 11")	3440 (11' 3")	-	-	-
	Shoe width	mm (in)	●600 (24)	●700 (28)	-	-	-
	Operating weight	kg (lb)	49680 (109530)	50230 (110740)	-	-	-
	Ground pressure	kgf/cm ² (psi)	0.86 (12.23)	0.75 (10.67)	-	-	-
	Overall width	mm (ft-in)	3340 (10' 11")	3440 (11' 3")	-	-	-

★ : Double grouser

● : Heavy duty grouser

(3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

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

(4) SELECTION OF TRACK SHOE

Suitable track shoes should be selected according to operating conditions.

Method of selecting shoes

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

Select the narrowest shoe possible to meet the required flotation and ground pressure. Application of wider shoes than recommendations will cause unexpected problem such as bending of shoes, crack of link, breakage of pin, loosening of shoe bolts and the other various problems.

※ **Table 1**

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

※ **Table 2**

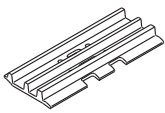
Category	Applications	Applications
A	Rocky ground, river beds, normal soil	· Travel at low speed on rough ground with large obstacles such as boulders or fallen trees
B	Normal soil, soft ground	· These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees · Travel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

2) HX520 L

(1) TRACKS

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

(2) TYPES OF SHOES

Model	Shapes		Triple grouser			
						
HX520 L	Shoe width	mm (in)	600 (24)	700 (28)	750 (30)	800 (32)
	Operating weight	kg (lb)	52400 (115520)	52920 (116670)	53180 (117240)	53440 (117810)
	Ground pressure	kgf/cm ² (psi)	0.91 (12.94)	0.79 (11.23)	0.74 (10.52)	0.70 (9.95)
	Overall width	mm (ft-in)	3540 (11' 7")	3640 (11' 11")	3690 (12' 1")	3740 (12' 3")
	Shoe width	mm (in)	★600 (24)	★700 (28)	-	-
	Operating weight	kg (lb)	52215 (115110)	52735 (116260)	-	-
	Ground pressure	kgf/cm ² (psi)	0.91 (12.94)	0.78 (11.09)	-	-
	Overall width	mm (ft-in)	3540 (11' 7")	3640 (11' 11")	-	-
	Shoe width	mm (in)	●600 (24)	●700 (28)	-	-
	Operating weight	kg (lb)	52580 (115920)	53130 (117130)	-	-
	Ground pressure	kgf/cm ² (psi)	0.91 (12.94)	0.79 (11.2)	-	-
	Overall width	mm (ft-in)	3540 (11' 7")	3640 (11' 11")	-	-

★ : Double grouser

● : Heavy duty grouser

(3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	3 EA
Track rollers	9 EA
Track shoes	53 EA

(4) SELECTION OF TRACK SHOE

Suitable track shoes should be selected according to operating conditions.

Method of selecting shoes

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

Select the narrowest shoe possible to meet the required flotation and ground pressure. Application of wider shoes than recommendations will cause unexpected problem such as bending of shoes, crack of link, breakage of pin, loosening of shoe bolts and the other various problems.

※ **Table 1**

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

※ **Table 2**

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

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Scania DC13
Type	4-cycle turbocharged charger air cooled diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	6 cylinders, in-line
Firing order	1-5-3-6-2-4
Combustion chamber type	Direct injection type
Cylinder bore × stroke	130 × 160 mm (5.12" × 6.3")
Piston displacement	12700 cc (775 cu in)
Compression ratio	17.5 : 1
Rated net horse power (SAE J1349)	424 Hp at 1900 rpm (316 kW at 1900 rpm)
Rated gross horse power (SAE J1995)	444 Hp at 1900 rpm (331 kW at 1900 rpm)
Maximum torque	232 kgf · m (1678 lbf · ft) at 1300 rpm
Engine oil quantity	38 ℓ (10 U.S. gal)
Dry weight	1075 kg (2370 lb)
Low idling speed	800 ± 50 rpm
High idling speed	1900 + 50 rpm
Rated fuel consumption	152.8 g/Hp · hr at 1900 rpm
Starting motor	24V-5.5kW
Alternator	24V-100A
Battery	2 × 12V × 200Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 200 cc/rev
Maximum pressure	330 kgf/cm ² (4690 psi) [360 kgf/cm ² (5120 psi)]
Rated oil flow	2 × 380 ℓ /min (100.4 U.S. gpm / 83.6 U.K. gpm)
Rated speed	1750 rpm

[] : Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	16 cc/rev
Maximum pressure	40 kgf/cm ² (570 psi)
Rated oil flow	28 ℓ /min (7.4 U.S. gpm/6.2 U.K. gpm)

4) MAIN CONTROL VALVE

Item		Specification	
		HX480/520 L	HX480/520 L Long reach
Type		9 spools	
Operating method		Hydraulic pilot system	
Main relief valve pressure		330 kgf/cm ² (4690 psi) [360 kgf/cm ² (5120 psi)]	
Port relief valve pressure	Boom	380 kgf/cm ² (5400 psi)	380 kgf/cm ² (5400 psi)
	Arm	380 kgf/cm ² (5400 psi)	280 kgf/cm ² (3980 psi)
	Bucket	380 kgf/cm ² (5400 psi)	280 kgf/cm ² (3980 psi)

[] : Power boost

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	142.6 cc/rev
Relief pressure	285 kgf/cm ² (4050 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	63.3 kgf · m (458 lbf · ft) over
Brake release pressure	Craking : 20.9 kgf/cm ² (297 psi) Full stroke : 35.5 kgf/cm ² (505 psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	330 kgf/cm ² (4690 psi)
Capacity (max / min)	281.7/175.9 cc/rev
Reduction gear type	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	15.7 kgf/cm ² (114 psi) below
Braking torque	120 kgf · m (1707 lbf · ft) over

7) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	Ø170 × Ø115 × 1570 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	Ø190 × Ø130 × 1820 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø160 × Ø110 × 1370 mm (HX480 L) Ø170 × Ø115 × 1370 mm (HX520 L)
	Cushion	Extend only

- ※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.
- ※ Discoloration does not cause any harmful effect on the cylinder performance.

8) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
HX480 L	Standard	600 mm (24")	0.86 kgf/cm ² (12.23 psi)	53	3340 mm (10' 11")
	Option	700 mm (28")	0.75 kgf/cm ² (10.67 psi)	53	3440 mm (11' 3")
		750 mm (30")	0.70 kgf/cm ² (9.95 psi)	53	3490 mm (11' 5")
		800 mm (32")	0.66 kgf/cm ² (9.39 psi)	53	3540 mm (11' 7")
		900 mm (36")	0.59 kgf/cm ² (8.39 psi)	53	3640 mm (11' 11")
		★600 mm (24")	0.86 kgf/cm ² (12.23 psi)	53	3340 mm (10' 11")
		★700 mm (28")	0.74 kgf/cm ² (10.52 psi)	53	3440 mm (11' 3")
		●600 mm (24")	0.86 kgf/cm ² (12.23 psi)	53	3340 mm (10' 11")
		●700 mm (28")	0.75 kgf/cm ² (10.67 psi)	53	3440 mm (11' 3")
HX520 L	Standard	600 mm (24")	0.91 kgf/cm ² (12.94 psi)	53	3540 mm (11' 7")
	Option	700 mm (28")	0.79 kgf/cm ² (11.23 psi)	53	3640 mm (11' 11")
		750 mm (30")	0.74 kgf/cm ² (10.52 psi)	53	3690 mm (12' 1")
		800 mm (32")	0.70 kgf/cm ² (9.95 psi)	53	3740 mm (12' 3")
		★600 mm (24")	0.91 kgf/cm ² (12.94 psi)	53	3540 mm (11' 7")
		★700 mm (28")	0.78 kgf/cm ² (11.09 psi)	53	3640 mm (11' 11")
		●600 mm (24")	0.91 kgf/cm ² (12.94 psi)	53	3540 mm (11' 7")
		●700 mm (28")	0.79 kgf/cm ² (11.2 psi)	53	3640 mm (11' 11")

- ★ : Double grouser
- : Heavy duty grouser

9) BUCKET

Item	Capacity		Tooth quantity	Width
	SAE heaped	CECE heaped		
HX480 L	1.00 m ³ (1.31 yd ³)	0.90 m ³ (1.18 yd ³)	3	1030 mm (41")
	1.38 m ³ (1.80 yd ³)	1.24 m ³ (1.62 yd ³)	4	1215 mm (48")
	2.20 m ³ (2.88 yd ³)	1.93 m ³ (2.52 yd ³)	5	1685 mm (66")
	2.79 m ³ (3.65 yd ³)	2.47 m ³ (3.23 yd ³)	5	1865 mm (73")
	3.00 m ³ (3.92 yd ³)	2.70 m ³ (3.53 yd ³)	6	1985 mm (78")
	◆2.20 m ³ (2.88 yd ³)	1.93 m ³ (2.52 yd ³)	5	1685 mm (66")
	◆2.43 m ³ (3.18 yd ³)	2.11 m ³ (2.76 yd ³)	5	1830 mm (72")
	◆2.79 m ³ (3.65 yd ³)	2.47 m ³ (3.23 yd ³)	5	1865 mm (73")
	◆3.20 m ³ (4.19 yd ³)	2.82 m ³ (3.69 yd ³)	6	2075 mm (82")
	◆2.20 m ³ (2.88 yd ³)	1.93 m ³ (2.52 yd ³)	5	1685 mm (66")
	◆2.43 m ³ (3.18 yd ³)	2.11 m ³ (2.76 yd ³)	5	1830 mm (72")
	◆2.79 m ³ (3.65 yd ³)	2.47 m ³ (3.23 yd ³)	5	1865 mm (73")
	◆3.20 m ³ (4.19 yd ³)	2.82 m ³ (3.69 yd ³)	6	2075 mm (82")
HX520 L	1.00 m ³ (1.31 yd ³)	0.90 m ³ (1.18 yd ³)	3	1030 mm (41")
	1.38 m ³ (1.80 yd ³)	1.24 m ³ (1.62 yd ³)	4	1215 mm (48")
	2.20 m ³ (2.88 yd ³)	1.93 m ³ (2.52 yd ³)	5	1685 mm (66")
	2.79 m ³ (3.65 yd ³)	2.47 m ³ (3.23 yd ³)	5	1865 mm (73")
	3.00 m ³ (3.92 yd ³)	2.70 m ³ (3.53 yd ³)	6	1985 mm (78")
	◆2.20 m ³ (2.88 yd ³)	1.93 m ³ (2.52 yd ³)	5	1685 mm (66")
	◆2.43 m ³ (3.18 yd ³)	2.11 m ³ (2.76 yd ³)	5	1830 mm (72")
	◆2.79 m ³ (3.65 yd ³)	2.47 m ³ (3.23 yd ³)	5	1865 mm (73")
	◆3.20 m ³ (4.19 yd ³)	2.82 m ³ (3.69 yd ³)	6	2075 mm (82")
	◆1.81 m ³ (2.37 yd ³)	1.50 m ³ (1.96 yd ³)	4	1540 mm (61")
	◆2.20 m ³ (2.88 yd ³)	1.93 m ³ (2.52 yd ³)	5	1685 mm (66")
	◆2.43 m ³ (3.18 yd ³)	2.11 m ³ (2.76 yd ³)	5	1830 mm (72")
	◆2.70 m ³ (3.53 yd ³)	2.39 m ³ (3.13 yd ³)	5	1800 mm (71")
	◆2.79 m ³ (3.65 yd ³)	2.47 m ³ (3.23 yd ³)	5	1865 mm (73")
	◆3.00 m ³ (3.92 yd ³)	2.76 m ³ (3.61 yd ³)	6	1995 mm (79")
	◆3.20 m ³ (4.19 yd ³)	2.82 m ³ (3.69 yd ³)	6	2075 mm (82")

◆ : Heavy duty bucket

◆ : Rock - heavy duty bucket

9. RECOMMENDED OILS

HD Hyundai Construction Equipment genuine lubricating oils have been developed to offer the best performance and service life for your equipment. These oils have been tested according to the specifications of HD Hyundai Construction Equipment and, therefore, will meet the highest safety and quality requirements.

We recommend that you use only HD Hyundai Construction Equipment genuine lubricating oils and grease officially approved by HD Hyundai Construction Equipment.

Service point	Kind of fluid	Capacity ℓ (U.S. gal)	Ambient temperature °C (° F)									
			-50 (-58)	-30 (-22)	-20 (-4)	-10 (14)	0 (32)	10 (50)	20 (68)	30 (86)	40 (104)	
Engine oil pan	Engine oil	38.0 (10)	★SAE 5W-40									
								SAE 30				
					SAE 10W							
				SAE 10W-30								
					SAE 15W-40							
DEF/ AdBlue® tank	Mixture of urea and deionized water	69 (18.2)	ISO 22241, High-purity urea + deionized water (32.5:67.5)									
Swing drive	Gear oil	7.0×2 (1.8×2)	★SAE 75W-90									
Final drive		12×2 (3.2×2)			SAE 80W-90							
Hydraulic tank	Hydraulic oil	Tank : 262 (69.2)	★ISO VG 15									
				ISO VG 32								
		System : 486 (128.4)			ISO VG 46, HBHO VG 46★ ³							
					ISO VG 68							
Fuel tank	Diesel fuel★ ¹	621 (182)	★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	49.0 (13)	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.