SECTION 1 GENERAL

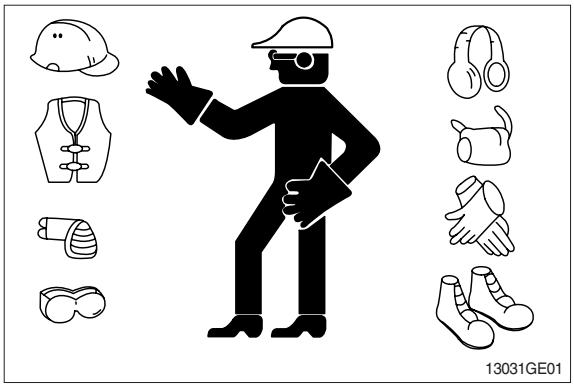
GROUP 1 SAFETY

FOLLOW SAFE PROCEDURE

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

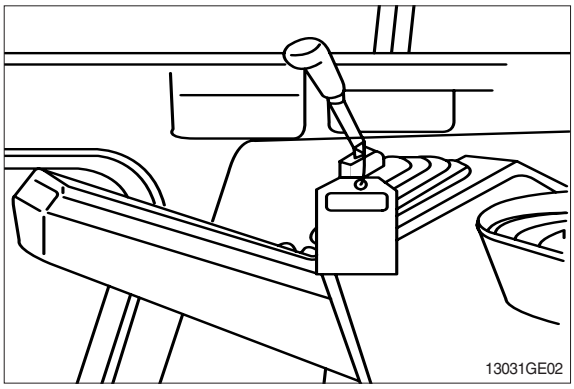
WEAR PROTECTIVE CLOTHING

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



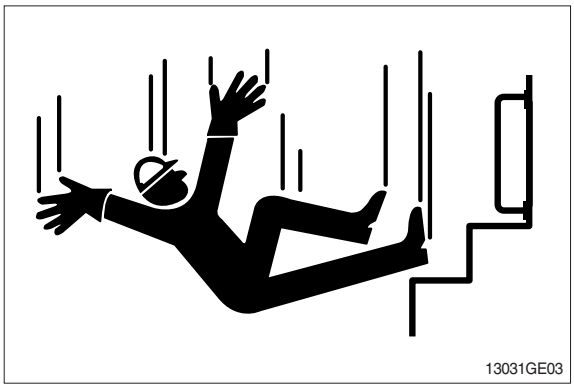
WARN OTHERS OF SERVICE WORK

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.

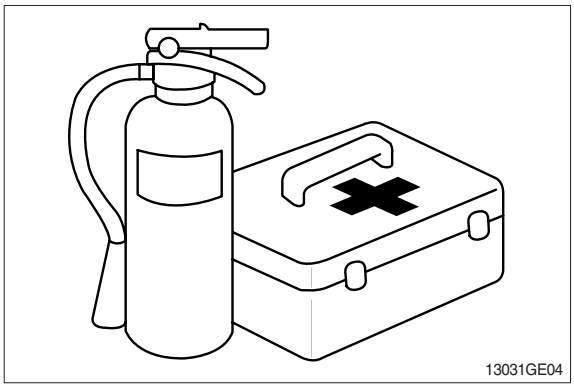


PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

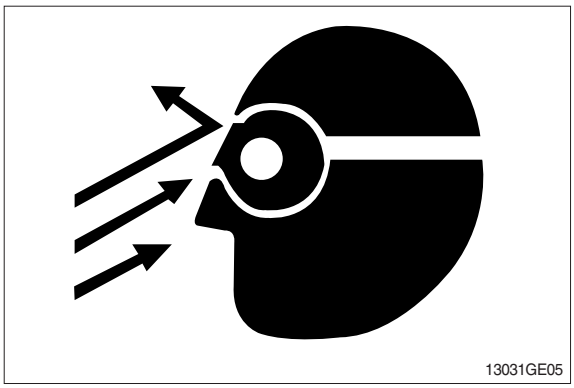
Keep a first aid kit and fire extinguisher handy.

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



PROTECT AGAINST FLYING DEBRIS

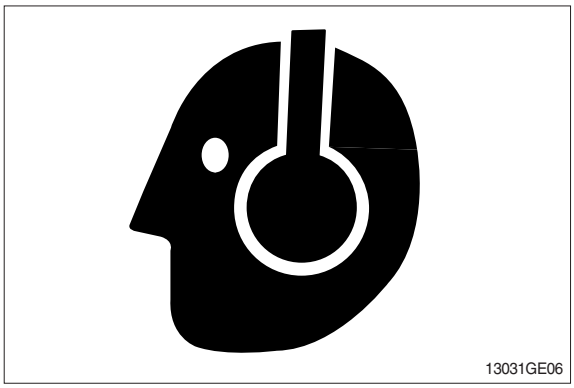
Guard against injury from flying pieces of metal or debris; Wear goggles or safety glasses.



PROTECT AGAINST NOISE

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

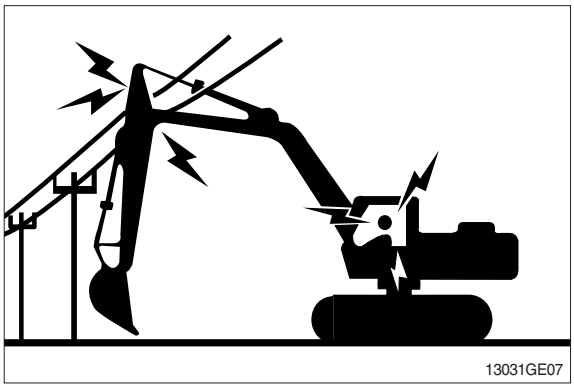
Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.



AVOID POWER LINES

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

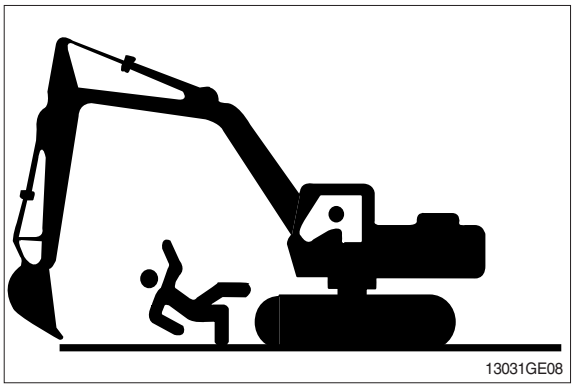
Never move any part of the machine or load closer to electric line than 3m(10ft) plus twice the line insulator length.



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.

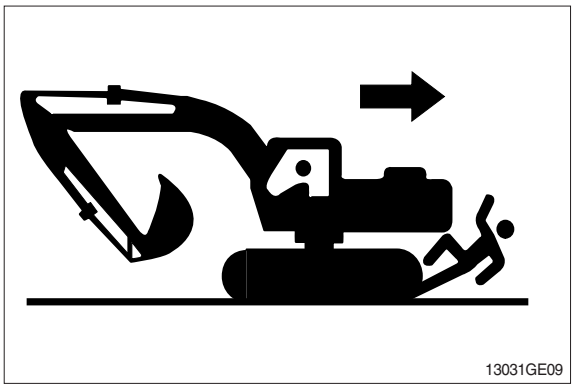

13031GE08

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.

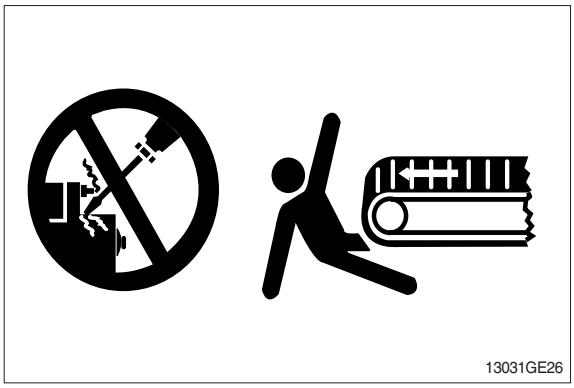
Use a signal person when moving, swinging, or operating the machine in congested areas. Coordinate hand signals before starting the excavator.


13031GE09

OPERATE ONLY FORM 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.


13031GE26

PARK MACHINE SAFELY

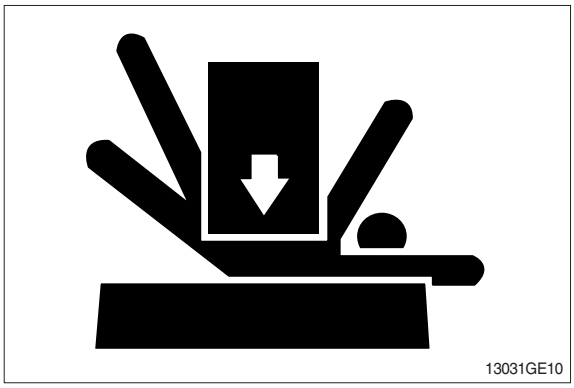
Before working on the machine:

- 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.

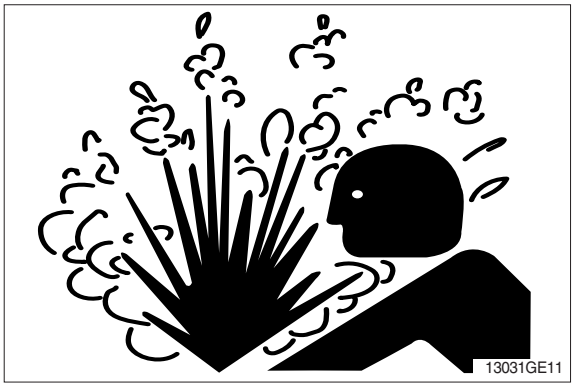
Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load.
Do not work under a machine that is supported solely by a jack. Follow recommended procedures in this manual.


13031GE10

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.


13031GE11

HANDLE FLUIDS SAFELY-AVOID FIRES

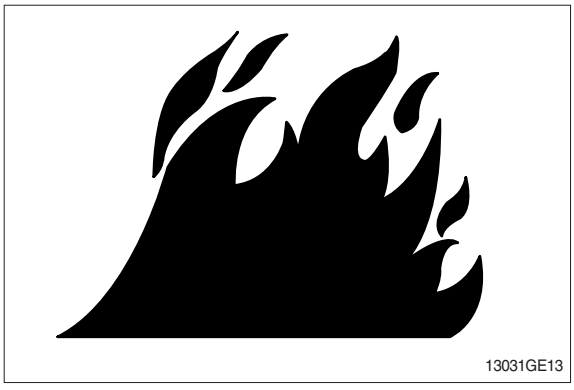
Handle fuel with care; It is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks. Always stop engine before refueling machine.
Fill fuel tank outdoors.


13031GE12

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

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

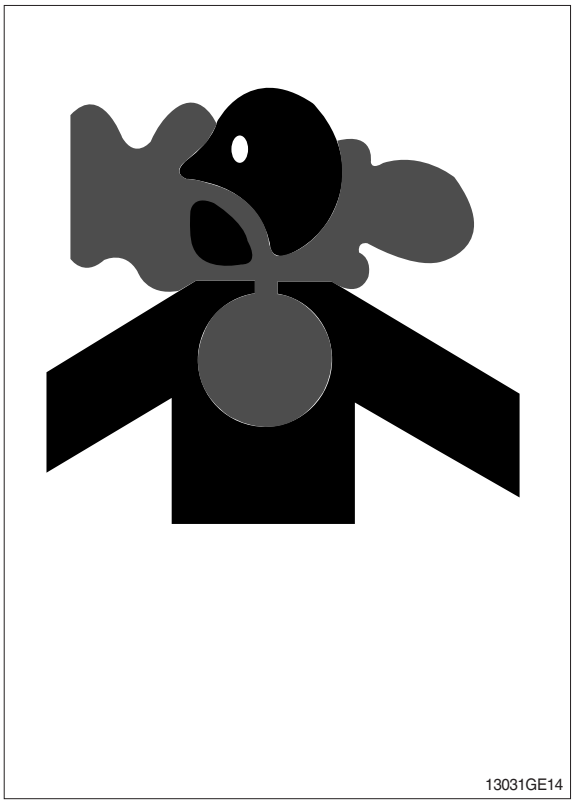
Do not store oily rags; They can ignite and burn spontaneously.


13031GE13

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.


13031GE14

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.

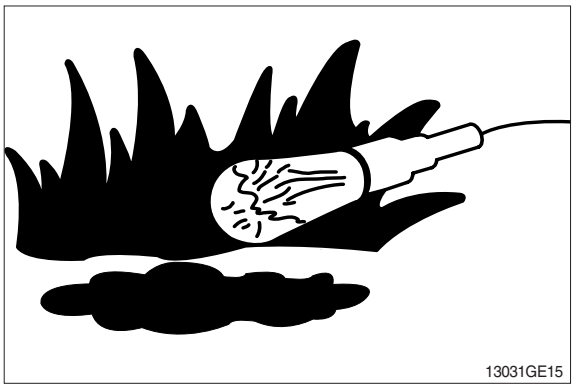
Do all work outside or in a well ventilated area. Dispose of paint and solvent properly.

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

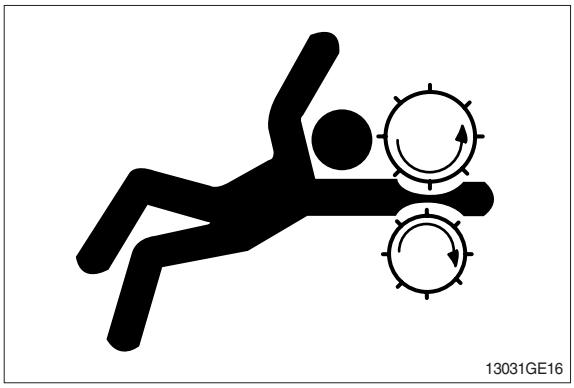
Illuminate your work area adequately but safely. Use a portable safety light for working inside or under the machine. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.


13031GE15

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.

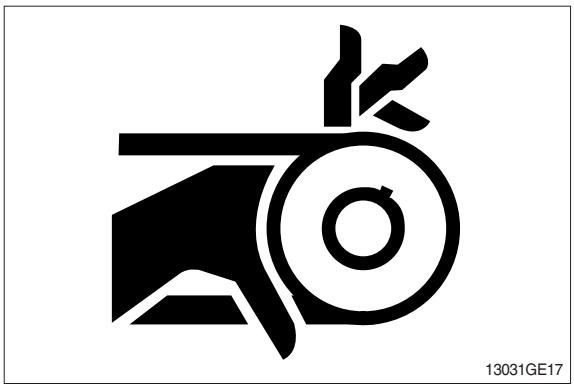
Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.



STAY CLEAR OF MOVING PARTS

Entanglements in moving parts can cause serious injury.

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



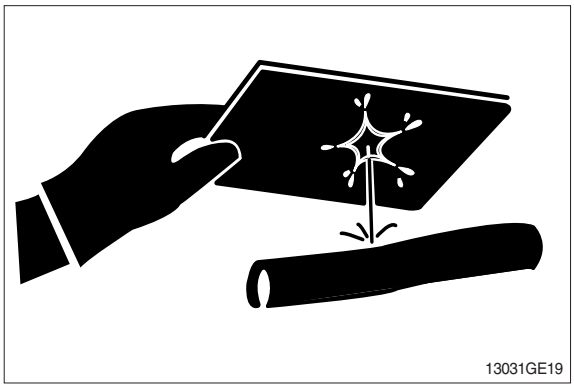
AVOID HIGH PRESSURE FLUIDS

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:

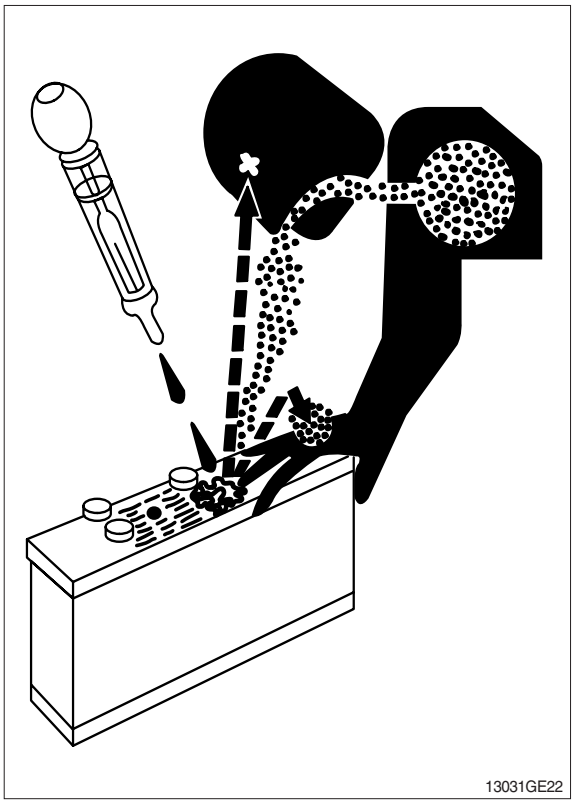
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling of dripping electrolyte.
5. Use proper jump start procedure.

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.



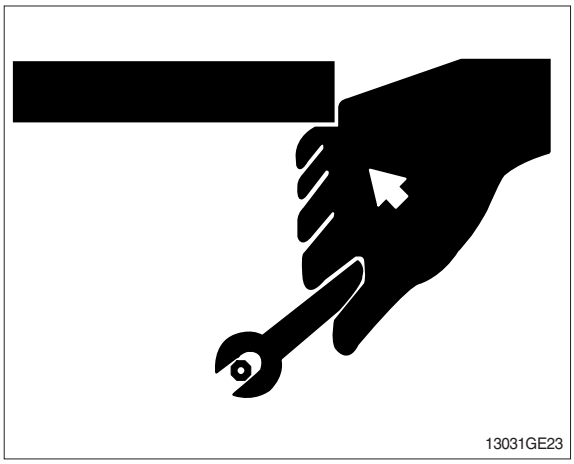
USE TOOLS PROPERLY

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.)

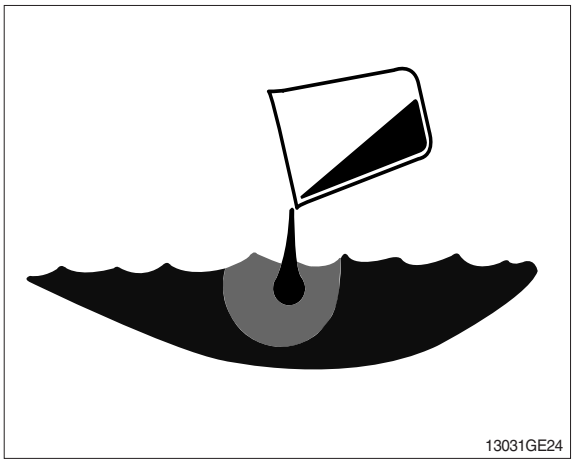


DISPOSE OF FLUIDS PROPERLY

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.

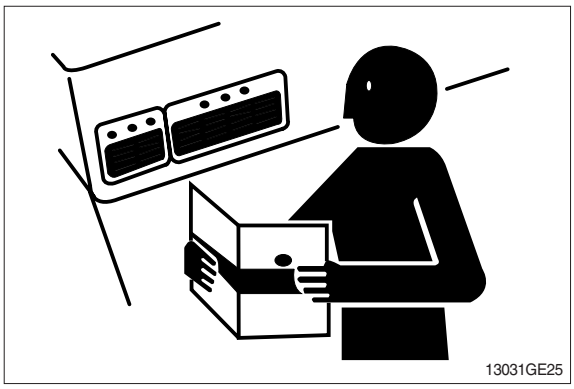
Use proper containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

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.


13031GE24

REPLACE SAFETY SIGNS

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

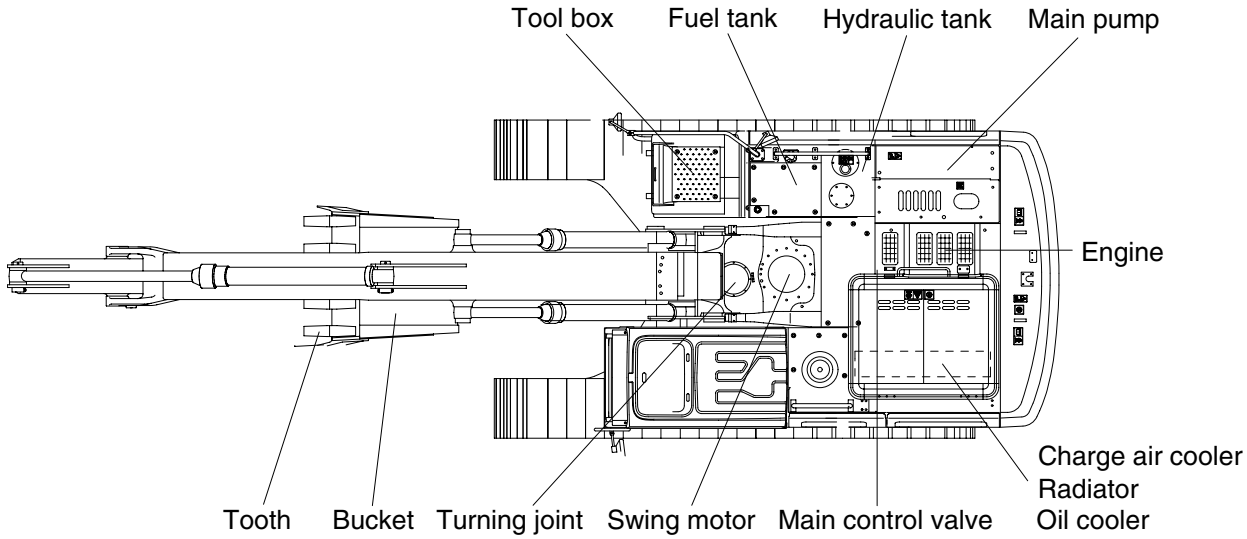

13031GE25

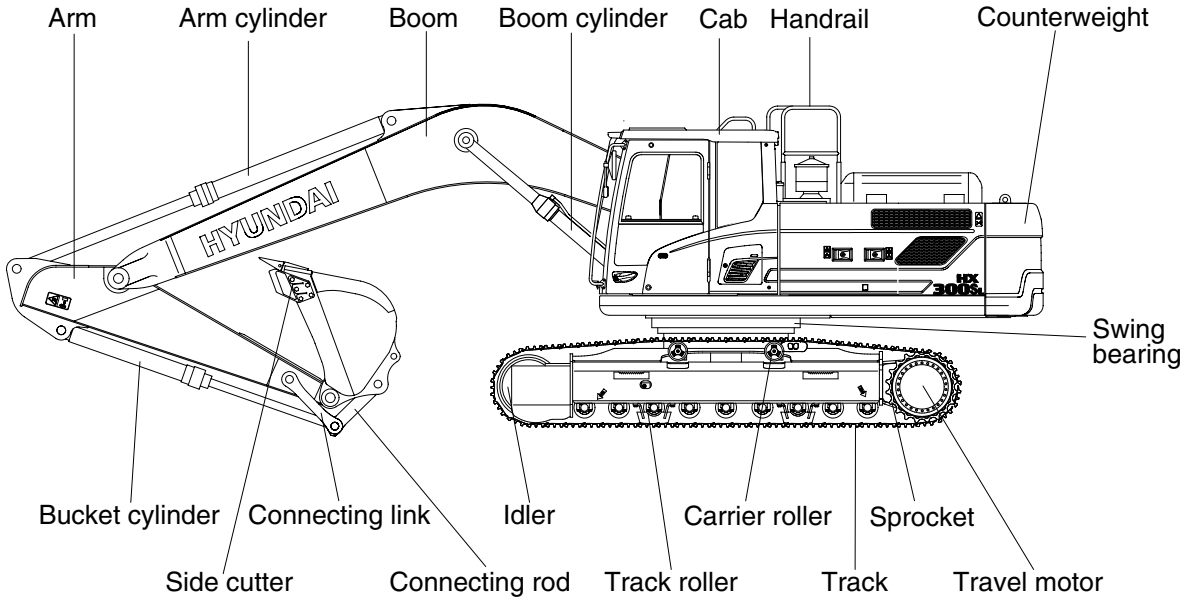
LIVE WITH SAFETY

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



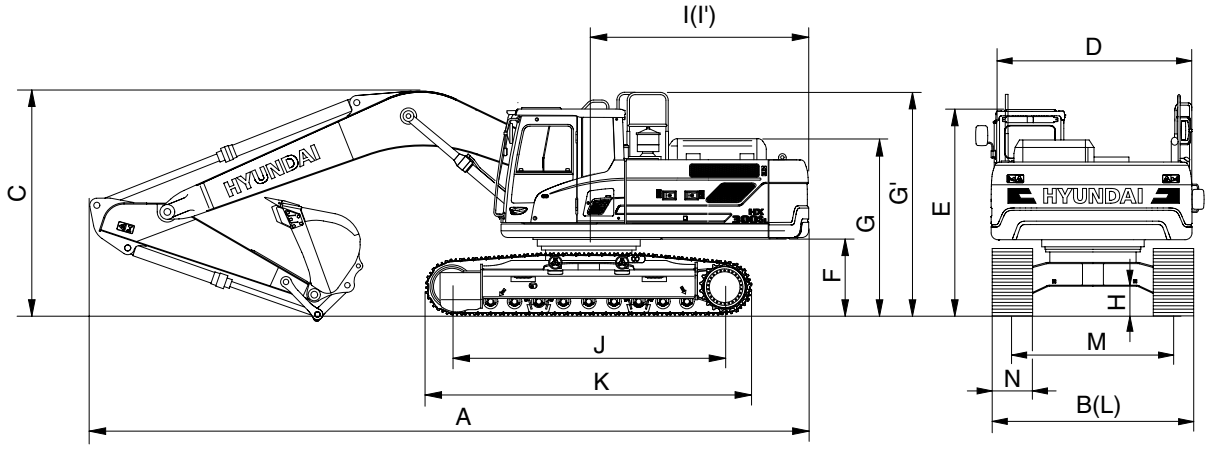


300S2SP01

2. SPECIFICATIONS

1) HX300S L

(1) 6.25 m (20' 6") boom and 3.05 m (10' 0") arm

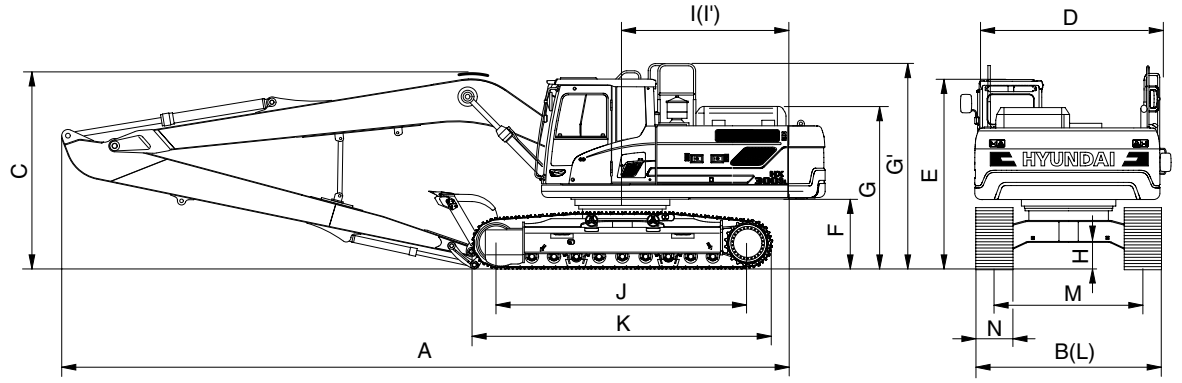


300S2SP02

Description		Unit	Specification
Operating weight		kg (lb)	30200 (66580)
Bucket capacity (SAE heaped), standard		m^3 (yd^3)	1.27 (1.66)
Overall length	A	mm (ft-in)	10740 (35' 3")
Overall width, with 600 mm shoe	B		3200 (10' 6")
Overall height of boom	C		3320 (10' 11")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3130 (10' 3")
Ground clearance of counterweight	F		1185 (3' 9")
Overall height of engine hood	G		2657 (8' 9")
Overall height of handrail	G'		3336 (10' 11")
Minimum ground clearance	H		500 (1' 8")
Rear-end distance	I		3265 (10' 9")
Rear-end swing radius	I'		3345 (11' 0")
Distance between tumblers	J		4030 (13' 3")
Undercarriage length	K		4940 (16' 2")
Undercarriage width	L		3200 (10' 6")
Track gauge	M		2600 (8' 6")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.9 (2.1/3.7)
Swing speed		rpm	10.2
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm^2 (psi)	0.58 (8.25)
Max traction force		kg (lb)	26500 (58420)

2) HX300S L LONG REACH

(1) 10.2 m (33' 6") boom and 7.85 m (25' 9") arm

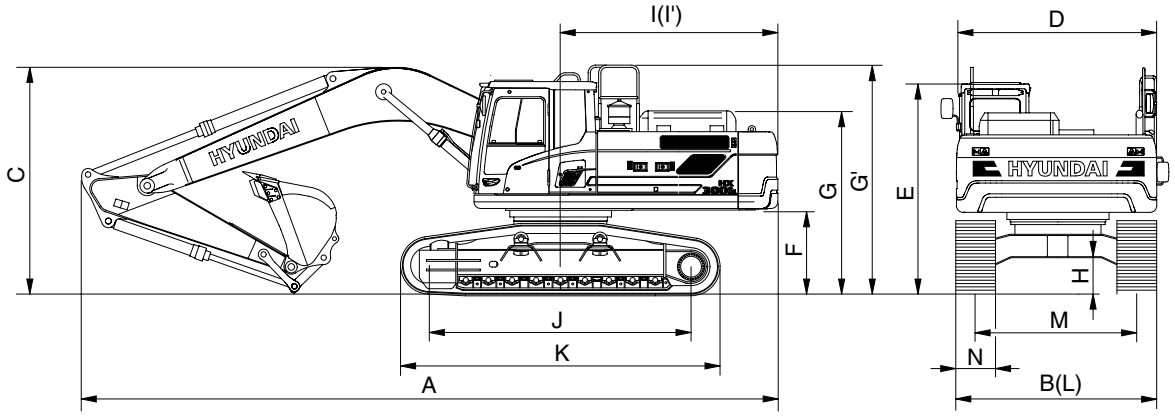


300S2SP03

Description		Unit	Specification
Operating weight		kg (lb)	33910 (74760)
Bucket capacity (SAE heaped), standard		m^3 (yd^3)	0.52 (0.68)
Overall length	A	mm (ft-in)	14750 (48' 5")
Overall width, with 800 mm shoe	B		3400 (11' 2")
Overall height of boom	C		3560 (11' 8")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3150 (10' 3")
Ground clearance of counterweight	F		1190 (3' 11")
Overall height of engine hood	G		2600 (8' 6")
Overall height of handrail	G'		3335 (10' 11")
Minimum ground clearance	H		500 (1' 8")
Rear-end distance	I		3265 (10' 9")
Rear-end swing radius	I'		3345 (11' 0")
Distance between tumblers	J		4030 (13' 3")
Undercarriage length	K		4940 (16' 2")
Undercarriage width	L		3400 (11' 2")
Track gauge	M		2600 (8' 6")
Track shoe width, standard	N		800 (32")
Travel speed (low/high)		km/hr (mph)	3.3/5.9 (2.1/3.7)
Swing speed		rpm	10.2
Gradeability		Degree (%)	35 (70)
Ground pressure (800 mm shoe)		kgf/cm^2 (psi)	0.49 (6.96)
Max traction force		kg (lb)	26500 (58420)

3) HX300S L HIGH WALKER

(1) 6.25 m (20' 6") boom and 3.05 m (10' 0") arm

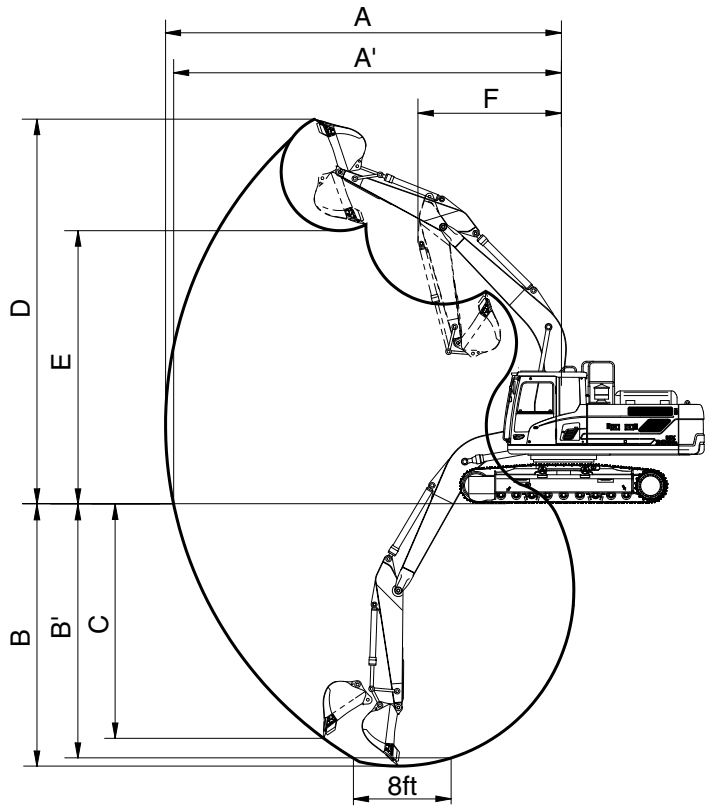


300S2SP04

Description		Unit	Specification
Operating weight		kg (lb)	34000 (74960)
Bucket capacity (SAE heaped), standard		m^3 (yd^3)	1.27 (1.66)
Overall length	A	mm (ft-in)	10590 (34' 9")
Overall width, with 700 mm shoe	B		3470 (11' 5")
Overall height of boom	C		3440 (11' 3")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3435 (11' 3")
Ground clearance of counterweight	F		1490 (4' 11")
Overall height of engine hood	G		2910 (9' 7")
Overall height of handrail	G'		3650 (12' 0")
Minimum ground clearance	H		765 (2' 6")
Rear-end distance	I		3265 (10' 9")
Rear-end swing radius	I'		3345 (11' 0")
Distance between tumblers	J		4030 (13' 3")
Undercarriage length	K		5010 (16' 5")
Undercarriage width	L		3470 (11' 5")
Track gauge	M		2870 (9' 5")
Track shoe width, standard	N		700 (28")
Travel speed (low/high)		km/hr (mph)	3.3/5.9 (2.1/3.7)
Swing speed		rpm	10.2
Gradeability		Degree (%)	35 (70)
Ground pressure (700 mm shoe)		kgf/cm^2 (psi)	0.56 (7.96)
Max traction force		kg (lb)	26500 (58420)

3. WORKING RANGE

1) HX300S L

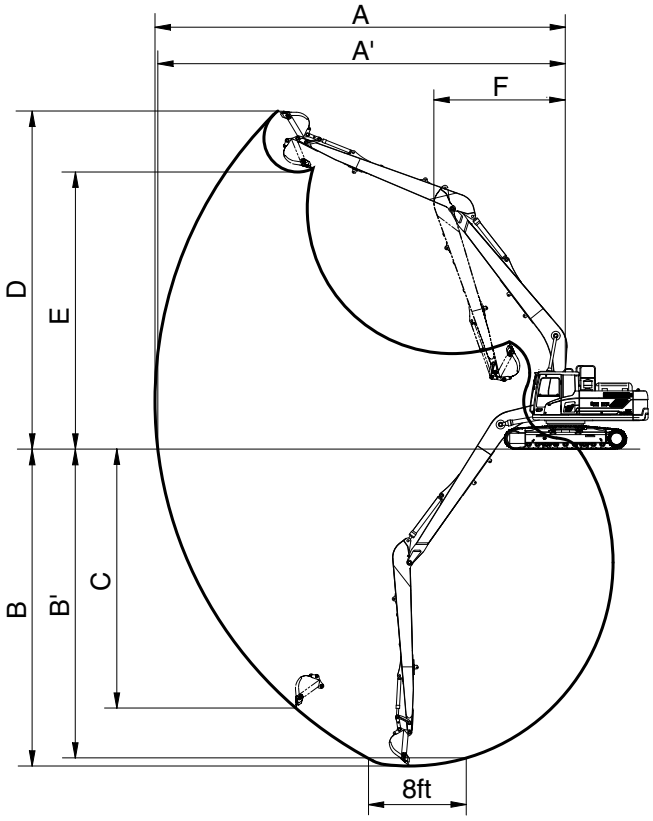


300S2SP06

Description	m (ft-in)	Boom	6.25 (20' 6")				
		Arm	2.10 (6' 11")	2.50 (8' 2")	2.85 (9' 4")	3.05 (10' 0")	3.75 (12' 4")
Max digging reach	mm (ft-in)	A	10040 (32' 11")	10310 (33' 10")	10620 (34' 10")	10810 (35' 6")	11420 (37' 6")
Max digging reach on ground		A'	9820 (32' 3")	10100 (33' 2")	10410 (34' 2")	10610 (34' 10")	11230 (36' 10")
Max digging depth		B	6380 (20' 11")	6780 (22' 3")	7130 (23' 5")	7330 (24' 1")	8030 (26' 4")
Max digging depth (8 ft level)		B'	6180 (20' 3")	6600 (21' 8")	6960 (22' 10")	7170 (23' 6")	7890 (25' 11")
Max vertical wall digging depth		C	5910 (19' 5")	5760 (18' 11")	6030 (19' 9")	6280 (20' 7")	6990 (22' 11")
Max digging height		D	10130 (33' 3")	9980 (32' 9")	10090 (33' 1")	10200 (33' 6")	10410 (34' 2")
Max dumping height		E	6990 (22' 11")	6930 (22' 9")	7050 (23' 2")	7150 (23' 5")	7360 (24' 2")
Min swing radius		F	4420 (14' 6")	4320 (14' 2")	4320 (14' 2")	4270 (14' 0")	4220 (13' 10")
Bucket digging force	kN	SAE	164.8 [179.8]	165.7 [180.8]	165.7 [180.8]	165.7 [180.8]	166.7 [181.9]
	kgf		16800 [18330]	16900 [18440]	16900 [18440]	16900 [18440]	17000 [18550]
	lbf		37040 [40410]	37260 [40650]	37260 [40650]	37260 [40650]	37480 [40900]
	kN	ISO	191.2 [208.6]	191.2 [208.6]	192.2 [209.7]	192.2 [209.7]	192.2 [209.7]
	kgf		19500 [21270]	19500 [21270]	19600 [21380]	19600 [21380]	19600 [21380]
	lbf		42990 [46890]	42990 [46890]	43210 [47130]	43210 [47130]	43210 [47130]
Arm digging force	kN	SAE	180.4 [196.8]	155.9 [170.1]	139.3 [151.9]	131.4 [143.4]	114.7 [125.1]
	kgf		18400 [20070]	15900 [17350]	14200 [15490]	13400 [14620]	11700 [12760]
	lbf		40570 [44250]	35050 [38250]	31310 [34150]	29540 [32230]	25790 [28130]
	kN	ISO	190.3 [207.5]	163.8 [178.7]	145.1 [158.4]	136.3 [148.7]	119.6 [130.5]
	kgf		19400 [21160]	16700 [18220]	14800 [16150]	13900 [15160]	12200 [13310]
	lbf		42770 [46650]	36820 [40170]	32630 [35600]	30640 [33420]	26900 [29340]

[ ] : Power boost

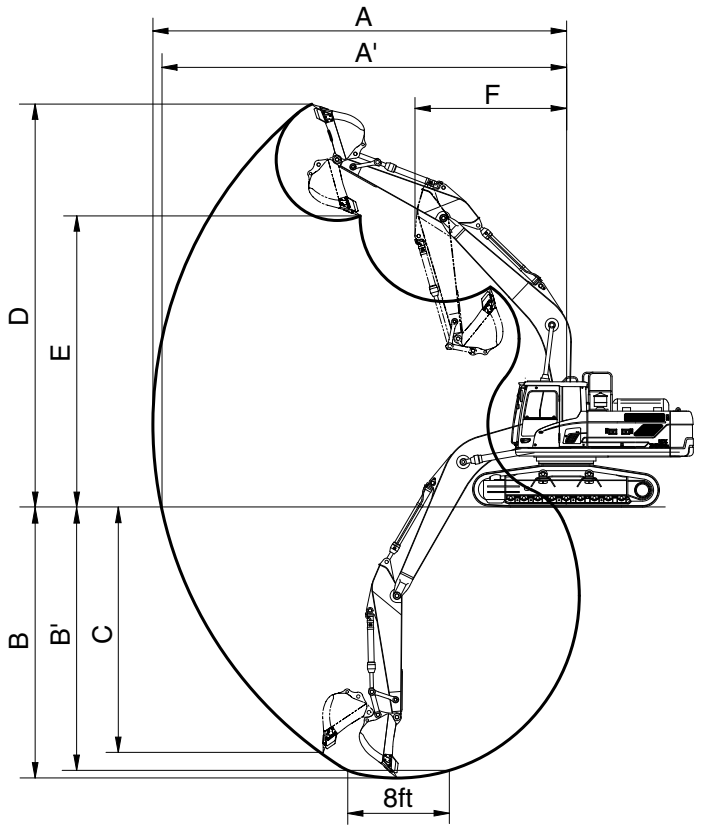
2) HX300S L LONG REACH



300S2SP07

Description	m (ft-in)	Boom	10.2 (33' 6")
		Arm	7.85 (25' 9")
Max digging reach	mm (ft-in)	A	18530 (60' 10")
Max digging reach on ground		A'	18410 (60' 5")
Max digging depth		B	14740 (48' 4")
Max digging depth (8 ft level)		B'	14660 (48' 1")
Max vertical wall digging depth		C	13700 (44' 11")
Max digging height		D	14590 (47' 10")
Max dumping height		E	12270 (40' 3")
Min swing radius		F	6270 (20' 7")
Bucket digging force	kN	SAE	164.8
	kgf		16800
	lbf		37040
	kN	ISO	191.2
	kgf		19500
	lbf		42990
Arm digging force	kN	SAE	180.4
	kgf		18400
	lbf		40570
	kN	ISO	190.3
	kgf		19400
	lbf		42770

3) HX300S L HIGH WALKER



300S2SP08

Description	m (ft-in)	Boom	6.25 (20' 6")				
		Arm	2.10 (6' 11")	2.50 (8' 2")	2.85 (9' 4")	3.05 (10' 0")	3.75 (12' 4")
Max digging reach	mm (ft-in)	A	10040 (32' 11")	10310 (33 '10")	10620 (34' 10")	10810 (35' 6")	11420 (37' 6")
Max digging reach on ground		A'	9750 (32' 0")	10020 (32' 10")	10410 (34' 2")	10540 (34' 7")	11170 (36' 8")
Max digging depth		B	6060 (19' 11")	6460 (21' 2")	7130 (23' 5")	7010 (23' 0")	7710 (25' 4")
Max digging depth (8 ft level)		B'	5860 (19' 3")	6280 (20' 7")	6960 (22' 10")	6850 (22' 6")	7570 (24' 10")
Max vertical wall digging depth		C	5590 (18' 4")	5440 (17' 10")	6030 (19' 9")	5960 (19' 7")	6670 (21' 11")
Max digging height		D	10450 (34' 3")	10300 (33' 10")	10090 (33' 1")	10520 (34' 6")	10730 (35' 2")
Max dumping height		E	7320 (24' 0")	7250 (23' 9")	7050 (23' 2")	7470 (24' 6")	7680 (25' 2")
Min swing radius		F	4420 (14' 6")	4320 (14' 2")	4320 (14' 2")	4270 (14' 0")	4220 (13' 10")
Bucket digging force	kN	SAE	164.8 [179.8]	165.7 [180.8]	165.7 [180.8]	165.7 [180.8]	166.7 [181.9]
	kgf		16800 [18330]	16900 [18440]	16900 [18440]	16900 [18440]	17000 [18550]
	lbf		37040 [40410]	37260 [40650]	37260 [40650]	37260 [40650]	37480 [40900]
	kN	ISO	191.2 [208.6]	191.2 [208.6]	192.2 [209.7]	192.2 [209.7]	192.2 [209.7]
	kgf		19500 [21270]	19500 [21270]	19600 [21380]	19600 [21380]	19600 [21380]
	lbf		42990 [46890]	42990 [46890]	43210 [47130]	43210 [47130]	43210 [47130]
Arm digging force	kN	SAE	180.4 [196.8]	155.9 [170.1]	139.3 [151.9]	131.4 [143.4]	114.7 [125.1]
	kgf		18400 [20070]	15900 [17350]	14200 [15490]	13400 [14620]	11700 [12760]
	lbf		40570 [44250]	35050 [38250]	31310 [34150]	29540 [32230]	25790 [28130]
	kN	ISO	190.3 [207.5]	163.8 [178.7]	145.1 [158.4]	136.3 [148.7]	119.6 [130.5]
	kgf		19400 [21160]	16700 [18220]	14800 [16150]	13900 [15160]	12200 [13310]
	lbf		42770 [46650]	36820 [40170]	32630 [35600]	30640 [33420]	26900 [29340]

[ ] : Power boost

4. WEIGHT

1) HX300S L

Item	HX300S L	
	kg	lb
Upperstructure assembly	13740	30290
Main frame weld assembly	2720	6000
Engine assembly	617	1360
Main pump assembly	201	443
Main control valve assembly	220	485
Swing motor assembly	350	770
Hydraulic oil tank assembly	250	550
Fuel tank assembly	240	530
Counterweight	5200	11460
Cab assembly	422	930
Lower chassis assembly	10790	23790
Track frame weld assembly	3750	8270
Swing bearing	435	960
Travel motor assembly	360	790
Turning joint	54	120
Sprocket	83	183
Track recoil spring	225	500
Idler	250	551
Carrier roller	35	80
Track roller	56	123
Track-chain assembly (600 ㎜ standard triple grouser shoe)	1880	4145
Front attachment assembly (6.25 m boom, 3.05 m arm, 1.27 m^3 SAE heaped bucket)	5550	12240
6.25 m boom assembly	2285	5040
3.05 m arm assembly	1025	2260
1.27 m^3 SAE heaped bucket	1010	2230
Boom cylinder assembly	270	600
Arm cylinder assembly	360	790
Bucket cylinder assembly	220	485
Bucket control linkage total	110	240

2) HX300S L LONG REACH

Item	HX300S L LONG REACH	
	kg	lb
Upperstructure assembly	15390	33930
Main frame weld assembly	2720	6000
Engine assembly	617	1360
Main pump assembly	201	443
Main control valve assembly	220	485
Swing motor assembly	350	770
Hydraulic oil tank assembly	250	550
Fuel tank assembly	240	530
Counterweight	7000	15450
Cab assembly	422	930
Lower chassis assembly	11750	25900
Track frame weld assembly	3750	8270
Swing bearing	435	960
Travel motor assembly	360	790
Turning joint	54	120
Sprocket	83	183
Track recoil spring	225	500
Idler	250	551
Carrier roller	35	80
Track roller	56	123
Track-chain assembly (800 ㎜ standard triple grouser shoe)	2353	5187
Front attachment assembly (10.2 m boom, 7.85 m arm, 0.52 m^3 SAE heaped bucket)	5920	13050
10.2 m boom assembly	2960	6530
7.85 m arm assembly	1340	2960
0.52 m^3 SAE heaped bucket	460	1010
Boom cylinder assembly	270	600
Arm cylinder assembly	360	790
Bucket cylinder assembly	96	212
Bucket control linkage total	110	240

3) HX300S L HIGH WALKER

Item	HX300S L HIGH WALKER	
	kg	lb
Upperstructure assembly	13740	30290
Main frame weld assembly	2720	6000
Engine assembly	617	1360
Aftertreatment assy	94	210
Main pump assembly	201	443
Main control valve assembly	220	485
Swing motor assembly	350	770
Hydraulic oil tank assembly	250	550
Fuel tank assembly	240	530
Counterweight	5200	11460
Cab assembly	422	930
Lower chassis assembly	13630	30050
Track frame weld assembly	5825	12840
Swing bearing	435	960
Travel motor assembly	360	790
Turning joint	54	120
Sprocket	83	183
Track recoil spring	225	500
Idler	250	551
Carrier roller	56	123
Track roller	56	123
Track-chain assembly (700 ㎜ standard triple grouser shoe)	2619	5774
Front attachment assembly (6.25 ㎥ boom, 3.05 ㎥ arm, 1.27 ㎥ SAE heaped bucket)	5550	12240
6.25 ㎥ boom assembly	2285	5040
3.05 ㎥ arm assembly	1025	2260
1.27 ㎥ SAE heaped bucket	1010	2230
Boom cylinder assembly	270	600
Arm cylinder assembly	360	790
Bucket cylinder assembly	220	485
Bucket control linkage total	110	240

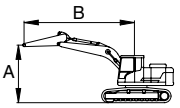
5. LIFTING CAPACITIES

1) HX300S L

Unit : mm

Model	Boom Type	Boom Length	Arm Length	Counterweight Weight (kg)	Shoe Width	Dozer Front	Dozer Rear	Outrigger Front	Outrigger Rear
HX300S L	Mono	6250	2100	5200	600	-	-	-	-

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



Lift-point height (A)		Lift-point radius (B) 3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		At max. reach Capacity		Reach
												m (ft)
7.5m	kg					*7670	*7670			*7890	7270	6.40
24.6ft	lb					*16910	*16910			*17390	16030	(21.0)
6.0m	kg					*7900	*7900			*7790	5630	7.44
19.7ft	lb					*17420	*17420			*17170	12410	(24.4)
4.5m	kg					*8950	7670	*7930	5470	7630	4850	8.06
14.8ft	lb					*19730	16910	*17480	12060	16820	10690	(26.5)
3.0m	kg					*10270	7270	8410	5290	7090	4480	8.37
9.8ft	lb					*22640	16030	18540	11660	15630	9880	(27.5)
1.5m	kg					*11350	6960	8220	5130	6960	4380	8.40
4.9ft	lb					*25020	15340	18120	11310	15340	9660	(27.6)
0.0m	kg					11330	6810	8120	5040	7220	4520	8.16
0.0ft	lb					24980	15010	17900	11110	15920	9960	(26.8)
-1.5m	kg			*15530	10360	11310	6800	8160	5070	8020	4990	7.60
-4.9ft	lb			*34240	22840	24930	14990	17990	11180	17680	11000	(24.9)
-3.0m	kg	*18440	*18440	*14030	10560	*10600	6940			*9060	6090	6.66
-9.8ft	lb	*40650	*40650	*30930	23280	*23370	15300			*19970	13430	(21.9)
-4.5m	kg			*10580	*10580					*8760	*8760	5.12
-14.8ft	lb			*23320	*23320					*19310	*19310	(16.8)

※ Note

1. Lifting capacity are based on SAE J1097 and ISO 10567.
2. Lifting capacity of the ROBEX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The lift-point is bucket mounting pin on the arm (without bucket).
4. *indicates load limited by hydraulic capacity.

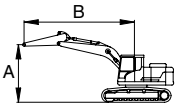
※ Lifting capacities are based upon a standard machine conditions.
Lifting capacities will vary with different work tools, ground conditions and attachments.
The difference between the weight of a work tool attachment must be subtracted.
Consult your Hyundai dealer regarding the lifting capacities for 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.

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX300S L	Mono	6250	2500	5200	600	-	-	-	-

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

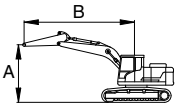


Lift-point height (A)		Lift-point radius (B)								At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
												m (ft)
7.5m	kg					*6980	*6980			*6760	6760	6.74
24.6ft	lb					*15390	*15390			*14900	14900	(22.1)
6.0m	kg					*7380	*7380	*7170	5630	*6440	5330	7.74
19.7ft	lb					*16270	*16270	*15810	12410	*14200	11750	(25.4)
4.5m	kg			*10660	*10660	*8470	7750	*7530	5500	*6420	4620	8.34
14.8ft	lb			*23500	*23500	*18670	17090	*16600	12130	*14150	10190	(27.4)
3.0m	kg			*13720	10980	*9850	7320	*8180	5300	*6640	4270	8.64
9.8ft	lb			*30250	24210	*21720	16140	*18030	11680	*14640	9410	(28.3)
1.5m	kg					*11040	6970	8220	5120	6630	4160	8.67
4.9ft	lb					*24340	15370	18120	11290	14620	9170	(28.4)
0.0m	kg			*16170	10220	11300	6770	8080	5000	6840	4270	8.43
0.0ft	lb			*35650	22530	24910	14930	17810	11020	15080	9410	(27.7)
-1.5m	kg	*11150	*11150	*15780	10240	11240	6730	8060	4980	7520	4670	7.89
-4.9ft	lb	*24580	*24580	*34790	22580	24780	14840	17770	10980	16580	10300	(25.9)
-3.0m	kg	*19830	*19830	*14550	10410	*10980	6830			*9000	5590	6.99
-9.8ft	lb	*43720	*43720	*32080	22950	*24210	15060			*19840	12320	(22.9)
-4.5m	kg	*15970	*15970	*11820	10790					*9210	7980	5.55
-14.8ft	lb	*35210	*35210	*26060	23790					*20300	17590	(18.2)

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX300S L	Mono	6250	2850	5200	600	-	-	-	-

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

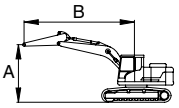


Lift-point height (A)		Lift-point radius (B)								At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
												m (ft)
7.5m	kg									*5020	*5020	7.14
24.6ft	lb									*11070	*11070	(23.4)
6.0m	kg					*6850	*6850	*6660	5630	*4800	*4800	8.08
19.7ft	lb					*15100	*15100	*14680	12410	*10580	*10580	(26.5)
4.5m	kg			*9820	*9820	*7960	7760	*7120	5470	*4790	4300	8.66
14.8ft	lb			*21650	*21650	*17550	17110	*15700	12060	*10560	9480	(28.4)
3.0m	kg			*12880	11090	*9380	7310	*7830	5260	*4960	3980	8.95
9.8ft	lb			*28400	24450	*20680	16120	*17260	11600	*10930	8770	(29.4)
1.5m	kg			*15120	10380	*10670	6920	8160	5050	*5310	3880	8.98
4.9ft	lb			*33330	22880	*23520	15260	17990	11130	*11710	8550	(29.5)
0.0m	kg			*15970	10110	11220	6690	8000	4910	*5940	3970	8.75
0.0ft	lb			*35210	22290	24740	14750	17640	10820	*13100	8750	(28.7)
-1.5m	kg	*11280	*11280	*15830	10080	11120	6610	7940	4860	6970	4300	8.23
-4.9ft	lb	*24870	*24870	*34900	22220	24520	14570	17500	10710	15370	9480	(27.0)
-3.0m	kg	*18980	*18980	*14840	10220	*11130	6670			8250	5070	7.38
-9.8ft	lb	*41840	*41840	*32720	22530	*24540	14700			18190	11180	(24.2)
-4.5m	kg	*17280	*17280	*12560	10540	*9020	6960			*8940	6920	6.03
-14.8ft	lb	*38100	*38100	*27690	23240	*19890	15340			*19710	15260	(19.8)

Unit : mm

Model	Boom Type	Boom Length	Arm Length	Counterweight Weight (kg)	Shoe Width	Dozer Front	Dozer Rear	Outrigger Front	Outrigger Rear
HX300S L	Mono	6250	3050	5200	600	-	-	-	-

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

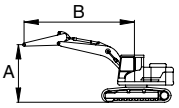


Lift-point height (A)		Lift-point radius (B) 3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		9.0 m (29.5 ft)		At max. reach Capacity		Reach
														m (ft)
7.5 m (24.6 ft)	kg											*4410	*4410	7.38
	lb											*9720	*9720	(24.2)
6.0 m (19.7 ft)	kg							*6490	5710			*4220	*4220	8.30
	lb							*14310	12590			*9300	*9300	(27.2)
4.5 m (14.8 ft)	kg			*9450	*9450	*7760	*7760	*6980	5540			*4210	4200	8.86
	lb			*20830	*20830	*17110	*17110	*15390	12210			*9280	9260	(29.1)
3.0 m (9.8 ft)	kg			*12510	11250	*9210	7400	*7720	5320	*5490	4000	*4340	3900	9.14
	lb			*27580	24800	*20300	16310	*17020	11730	*12100	8820	*9570	8600	(30.0)
1.5 m (4.9 ft)	kg			*14900	10490	*10550	7000	8210	5110	*6190	3900	*4640	3790	9.17
	lb			*32850	23130	*23260	15430	18100	11270	*13650	8600	*10230	8360	(30.1)
0.0 m (0.0 ft)	kg			*15940	10170	11280	6740	8040	4950			*5160	3870	8.94
	lb			*35140	22420	24870	14860	17730	10910			*11380	8530	(29.3)
-1.5 m (-4.9 ft)	kg	*11100	*11100	*15950	10110	11160	6640	7970	4890			*6050	4180	8.44
	lb	*24470	*24470	*35160	22290	24600	14640	17570	10780			*13340	9220	(27.7)
-3.0 m (-9.8 ft)	kg	*17910	*17910	*15100	10220	11210	6690	8050	4960			*7770	4870	7.61
	lb	*39480	*39480	*33290	22530	24710	14750	17750	10930			*17130	10740	(25.0)
-4.5 m (-14.8 ft)	kg	*18100	*18100	*13040	10520	*9550	6920					*8810	6480	6.32
	lb	*39900	*39900	*28750	23190	*21050	15260					*19420	14290	(20.7)
-6.0 m (-19.7 ft)	kg													
	lb													

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX300S L	Mono	6250	3750	5200	600	-	-	-	-

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



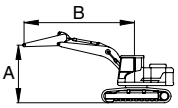
Lift-point height (A)		Lift-point radius (B)												At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		9.0 m (29.5 ft)		Capacity		Reach
																m (ft)
9.0 m	kg													*3820	*3820	6.87
(29.5 ft)	lb													*8420	*8420	(22.6)
7.5 m	kg									*5120	*5120			*3490	*3490	8.14
(24.6 ft)	lb									*11290	*11290			*7690	*7690	(26.7)
6.0 m	kg									*5700	*5700			*3370	*3370	8.97
(19.7 ft)	lb									*12570	*12570			*7430	*7430	(29.4)
4.5 m	kg							*6830	*6830	*6290	5620	*5230	4140	*3370	*3370	9.50
(14.8 ft)	lb							*15060	*15060	*13870	12390	*11530	9130	*7430	*7430	(31.2)
3.0 m	kg					*10960	*10960	*8340	7530	*7110	5370	6370	4020	*3490	*3490	9.76
(9.8 ft)	lb					*24160	*24160	*18390	16600	*15670	11840	14040	8860	*7690	*7690	(32.0)
1.5 m	kg					*13740	10700	*9850	7070	*7970	5120	6230	3890	*3720	3400	9.79
(4.9 ft)	lb					*30290	23590	*21720	15590	*17570	11290	13730	8580	*8200	7500	(32.1)
0.0 m	kg			*6810	*6810	*15380	10180	*10980	6740	8020	4920	6110	3780	*4110	3450	9.58
(0.0 ft)	lb			*15010	*15010	*33910	22440	*24210	14860	17680	10850	13470	8330	*9060	7610	(31.4)
-1.5 m	kg	*7070	*7070	*10570	*10570	*15920	10000	11090	6570	7890	4810	*5710	3740	*4750	3680	9.11
(-4.9 ft)	lb	*15590	*15590	*23300	*23300	*35100	22050	24450	14480	17390	10600	*12590	8250	*10470	8110	(29.9)
-3.0 m	kg	*11090	*11090	*15460	*15460	*15540	10020	11060	6540	7890	4800			*5900	4180	8.35
(-9.8 ft)	lb	*24450	*24450	*34080	*34080	*34260	22090	24380	14420	17390	10580			*13010	9220	(27.4)
-4.5 m	kg	*15990	*15990	*20280	*20280	*14140	10230	*10510	6680					*8250	5240	7.19
(-14.8 ft)	lb	*35250	*35250	*44710	*44710	*31170	22550	*23170	14730					*18190	11550	(23.6)
-6.0 m	kg			*15400	*15400	*10850	10700							*8670	8240	5.38
(-19.7 ft)	lb			*33950	*33950	*23920	23590							*19110	18170	(17.6)

2) HX300S L LONG REACH

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX300S L	Mono	10200	7850	7000	800	-	-	-	-

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



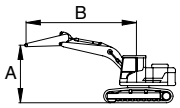
Lift-point height (A)		Lift-point radius (B)																						At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5m (14.8ft)		6.0m (19.7ft)		7.5m (24.6ft)		9.0m (29.5ft)		10.5m (34.4ft)		12.0m (39.4ft)		13.5m (44.3ft)		15.0m (49.2ft)		16.5m (54.1ft)		Capacity		Reach
13.5m	kg																							*750	*750	12.91
44.3ft	lb																							*1650	*1650	(42.4)
12.0m	kg																	*1000	*1000					*690	*690	14.11
39.4ft	lb																	*2200	*2200					*1520	*1520	(46.3)
10.5m	kg																	*1300	*1300	*700	*700			*660	*660	15.06
34.4ft	lb																	*2870	*2870	*1540	*1540			*1460	*1460	(49.4)
9.0m	kg																	*1480	*1480	*1090	*1090			*650	*650	15.82
29.5ft	lb																	*3260	*3260	*2400	*2400			*1430	*1430	(51.9)
7.5m	kg																	*1650	*1650	*1340	*1340			*640	*640	16.40
24.6ft	lb																	*3640	*3640	*2950	*2950			*1410	*1410	(53.8)
6.0m	kg															*2010	*2010	*1850	*1850	*1540	*1540	*890	*890	*650	*650	16.83
19.7ft	lb															*4430	*4430	*4080	*4080	*3400	*3400	*1960	*1960	*1430	*1430	(55.2)
4.5m	kg													*2570	*2570	*2370	*2370	*2120	*2120	*1750	*1750	*1110	*1110	*670	*670	17.11
14.8ft	lb													*5670	*5670	*5220	*5220	*4670	*4670	*3860	*3860	*2450	*2450	*1480	*1480	(56.1)
3.0m	kg					*8050	*8050			*4570	*4570	*3880	*3880	*3430	*3430	*2910	*2910	*2460	*2460	*1970	*1970	*1270	*1270	*700	*700	17.25
9.8ft	lb					*17750	*17750			*10080	*10080	*8550	*8550	*7560	*7560	*6420	*6420	*5420	*5420	*4340	*4340	*2800	*2800	*1540	*1540	(56.6)
1.5m	kg					*4070	*4070	*7170	*7170	*5470	*5470	*4490	4450	*3860	3550	*3440	2870	*2900	2360	*2210	1950	*1380	*1380	*750	*750	17.27
4.9ft	lb					*8970	*8970	*15810	*15810	*12060	*12060	*9900	9810	*8510	7830	*7580	6330	*6390	5200	*4870	4300	*3040	*3040	*1650	*1650	(56.7)
0.0m	kg			*1230	*1230	*3010	*3010	*7180	7030	*6260	5270	*5050	4130	*4270	3320	*3740	2710	*3360	2240	*2440	1860	*1410	*1410	*810	*810	17.15
0.0ft	lb			*2710	*2710	*6640	*6640	*15830	15500	*13800	11620	*11130	9110	*9410	7320	*8250	5970	*7410	4940	*5380	4100	*3110	*3110	*1790	*1790	(56.3)
-1.5m	kg	*1280	*1280	*1770	*1770	*3090	*3090	*5900	*5900	*6890	4920	*5520	3870	*4630	3130	*4010	2570	*3570	2140	*2610	1790	*1320	*1320	*890	*890	16.90
-4.9ft	lb	*2820	*2820	*3900	*3900	*6810	*6810	*13010	*13010	*15190	10850	*12170	8530	*10210	6900	*8840	5670	*7870	4720	*5750	3950	*2910	*2910	*1960	*1960	(55.4)
-3.0m	kg	*1920	*1920	*2410	*2410	*3550	*3550	*5840	*5840	*7330	4700	*5890	3690	*4920	2980	4170	2460	3520	2060	*2630	1740	*1000	*1000	*1000	*1000	16.50
-9.8ft	lb	*4230	*4230	*5310	*5310	*7830	*7830	*12870	*12870	*16160	10360	*12990	8140	*10850	6570	9190	5420	7760	4540	*5800	3840	*2200	*2200	*2200	*2200	(54.1)
-4.5m	kg	*2570	*2570	*3100	*3100	*4190	*4190	*6310	6230	*7600	4580	6110	3570	4930	2890	4090	2390	3470	2010	*2390	1710			*1140	*1140	15.96
-14.8ft	lb	*5670	*5670	*6830	*6830	*9240	*9240	*13910	13730	*16760	10100	13470	7870	10870	6370	9020	5270	7650	4430	*5270	3770			*2510	*2510	(52.3)
-6.0m	kg	*3270	*3270	*3860	*3860	*5000	*5000	*7130	6220	*7700	4530	6060	3520	4880	2840	4060	2360	3450	1990	*1720	1710			*1340	*1340	15.24
-19.7ft	lb	*7210	*7210	*8510	*8510	*11020	*11020	*15720	13710	*16980	9990	13360	7760	10760	6260	8950	5200	7610	4390	*3790	3770			*2950	*2950	(50.0)
-7.5m	kg	*4020	*4020	*4710	*4710	*5970	*5970	*8300	6290	*7620	4560	6070	3530	4890	2850	4070	2360	*3260	2010					*1630	*1630	14.33
-24.6ft	lb	*8860	*8860	*10380	*10380	*13160	*13160	*18300	13870	*16800	10050	13380	7780	10780	6280	8970	5200	*7190	4430					*3590	*3590	(47.0)
-9.0m	kg	*4850	*4850	*5690	*5690	*7170	*7170	*9220	6440	*7350	4650	*6040	3600	4950	2900	4130	2420							*2100	*2100	13.19
-29.5ft	lb	*10690	*10690	*12540	*12540	*15810	*15810	*20330	14200	*16200	10250	*13320	7940	10910	6390	9110	5340							*4630	*4630	(43.3)
-10.5m	kg	*5790	*5790	*6860	*6860	*8720	*8720	*8490	6660	*6820	4810	*5610	3730	*4650	3020									*2960	2630	11.74
-34.4ft	lb	*12760	*12760	*15120	*15120	*19220	*19220	*18720	14680	*15040	10600	*12370	8220	*10250	6660									*6530	5800	(38.5)
-12.0m	kg			*8320	*8320	*9440	*9440	*7340	6990	*5900	5070	*4770	3950											*4190	3520	9.85
-39.4ft	lb			*18340	*18340	*20810	*20810	*16180	15410	*13010	11180	*10520	8710											*9240	7760	(32.3)
-13.5m	kg																									
-44.3ft	lb																									

3) HX300S L HIGH WALKER

Unit : mm

Model	Boom Type	Boom Length	Arm Length	Counterweight Weight (kg)	Shoe Width	Dozer Front	Dozer Rear	Outrigger Front	Outrigger Rear
HX300S L	Mono	6250	3050	5200	600	-	-	-	-

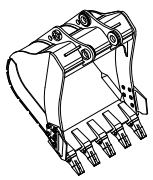
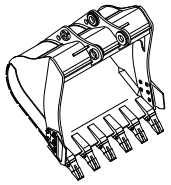
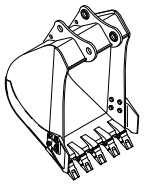
· : Rating over-front · : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B) 3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		9.0 m (29.5 ft)		At max. reach Capacity		Reach
														m (ft)
9.0 m (29.5 ft)	kg lb											*4760 *10490	*4760 *10490	6.34 (20.8)
7.5 m (24.6 ft)	kg lb							*5020 *11070	*5020 *11070			*4340 *9570	*4340 *9570	7.63 (25.0)
6.0 m (19.7 ft)	kg lb					*6840 *15080	*6840 *15080	*6560 *14460	*6560 *14460			*4200 *9260	*4200 *9260	8.45 (27.7)
4.5 m (14.8 ft)	kg lb			*10120 *22310	*10120 *22310	*8080 *17810	*8080 *17810	*7140 *15740	6600 14550			*4230 *9330	*4230 *9330	8.95 (29.4)
3.0 m (9.8 ft)	kg lb			*13160 *29010	*13160 *29010	*9540 *21030	8830 19470	*7900 *17420	6370 14040	*5780 *12740	4830 10650	*4400 *9700	*4400 *9700	9.17 (30.1)
1.5 m (4.9 ft)	kg lb			*15250 *33620	12840 28310	*10800 *23810	8440 18610	*8620 *19000	6150 13560	*6100 *13450	4730 10430	*4740 *10450	4630 10210	9.14 (30.0)
0.0 m (0.0 ft)	kg lb	*6560 *14460	*6560 *14460	*16020 *35320	12580 27730	*11570 *25510	8220 18120	8630 19030	6020 13270			*5320 *11730	4790 10560	8.86 (29.1)
-1.5 m (-4.9 ft)	kg lb	*12500 *27560	*12500 *27560	*15840 *34920	12570 27710	*11710 *25820	8150 17970	8590 18940	5980 13180			*6340 *13980	5240 11550	8.29 (27.2)
-3.0 m (-9.8 ft)	kg lb	*19800 *43650	*19800 *43650	*14760 *32540	12720 28040	*11060 *24380	8230 18140					*8390 *18500	6240 13760	7.36 (24.2)
-4.5 m (-14.8 ft)	kg lb	*17010 *37500	*17010 *37500	*12280 *27070	*12280 *27070							*8860 *19530	8700 19180	5.93 (19.4)

6. BUCKET SELECTION GUIDE

1) GENERAL BUCKET

		
1.27, 1.50 m³ SAE heaped bucket	1.73, 1.85 m³ SAE heaped bucket	★0.52 m³ SAE heaped bucket

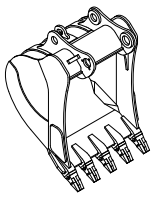
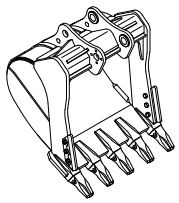
Capacity		Width		Weight	Recommendation					
					6.25 m (20' 6") boom					10.2 m (33' 6") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.1 m arm (6' 11")	2.5 m arm (8' 2")	2.85 m arm (9' 4")	3.05 m arm (10' 0")	3.75 m arm (12' 4")	7.85 m arm (25' 9")
1.27 m³ (1.66 yd³)	1.10 m³ (1.44 yd³)	1290 mm (51")	1410 mm (56")	1010 kg (2230 lb)	●	●	●	●	◐	X
1.50 m³ (1.96 yd³)	1.30 m³ (1.70 yd³)	1490 mm (59")	1610 mm (63.0")	1080 kg (2380 lb)	●	◐	◐	◐	■	X
1.73 m³ (2.26 yd³)	1.50 m³ (1.96 yd³)	1700 mm (67")	1820 mm (72")	1170 kg (2580 lb)	◐	■	■	■	▲	X
1.85 m³ (2.42 yd³)	1.60 m³ (2.09 yd³)	1800 mm (71")	1920 mm (76")	1230 kg (2710 lb)	■	■	▲	▲	▲	X
★0.52 m³ (0.68 yd³)	0.45 m³ (0.59 yd³)	935 mm (37")	1035 mm (41")	460 kg (1010 lb)	X	X	X	X	X	◐

★ : Long reach bucket

● Applicable for materials with density of 2100 kg/m³ (3500 lb/yd³) or less
◐ Applicable for materials with density of 1800 kg/m³ (3000 lb/yd³) or less
■ Applicable for materials with density of 1500 kg/m³ (2500 lb/yd³) or less
▲ Applicable for materials with density of 1200 kg/m³ (2000 lb/yd³) or less
X Not recommended

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

2) HEAVY DUTY AND ROCK-HEAVY DUTY BUCKET

	
◈ 1.27 m³ SAE ◈ 1.46 m³ SAE heaped bucket	◆ 1.16 m³ SAE ◆ 1.33 m³ SAE ◆ 1.50 m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation				
					6.25 m (20' 6") boom				
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.1 m arm (6' 11")	2.5 m arm (8' 2")	2.5 m arm (8' 2")	3.05 m arm (10' 0")	3.75 m arm (12' 4")
◈ 1.27 m³ (1.66 yd³)	1.10 m³ (1.44 yd³)	1310 mm (52")	-	1240 kg (2730 lb)	●	●	●	◐	■
◈ 1.46 m³ (1.91 yd³)	1.28 m³ (1.67 yd³)	1460 mm (57")	-	1320 kg (2910 lb)	●	◐	◐	■	■
◆ 1.16 m³ (1.52 yd ³)	1.10 m³ (1.31 yd³)	1340 mm (53")	-	1280 kg (2820 lb)	●	●	●	●	X
◆ 1.33 m³ (1.74 yd³)	1.16 m³ (1.52 yd³)	1420 mm (56")	-	1440 kg (3170 lb)	●	●	◐	◐	X
◆ 1.49 m³ (1.96 yd³)	1.28 m (1.67 yd³)	1620 mm (64")	-	1440 kg (3170 lb)	◐	◐	■	■	X

◈ : Heavy duty bucket
◆ : Rock-Heavy duty bucket

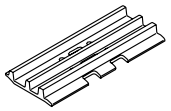
● Applicable for materials with density of 2100 kg/m³ (3500 lb/yd³) or less
◐ Applicable for materials with density of 1800 kg/m³ (3000 lb/yd³) or less
■ Applicable for materials with density of 1500 kg/m³ (2500 lb/yd³) or less
▲ Applicable for materials with density of 1200 kg/m³ (2000 lb/yd³) or less
X Not recommended

7. UNDERCARRIAGE

1) TRACKS

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

2) TYPES OF SHOES

Model	Shapes		Triple grouser			
						
HX300S L	Shoe width	mm (in)	600 (24)	700 (28)	800 (32)	-
	Operating weight	kg (lb)	30200 (66580)	30770 (67840)	31150 (68670)	-
	Ground pressure	kgf/cm^2 (psi)	0.58 (8.27)	0.51 (7.22)	0.45 (6.4)	-
	Overall width	mm (ft-in)	3200 (10' 6")	3300 (10' 10")	3400 (11' 1")	-
HX300S L LONG REACH	Shoe width	mm (in)	-	-	800 (32)	-
	Operating weight	kg (lb)	-	-	33910 (74760)	-
	Ground pressure	kgf/cm^2 (psi)	-	-	0.49 (6.96)	-
	Overall width	mm (ft-in)	-	-	3400 (11' 2")	-
HX300S L HIGH WALKER	Shoe width	mm (in)	600 (24)	700 (28)	800 (32)	★ 700 (28)
	Operating weight	kg (lb)	32490 (71630)	33060 (72880)	33440 (73720)	34000 (74960)
	Ground pressure	kgf/cm^2 (psi)	0.63 (8.89)	0.55 (7.76)	0.48 (6.87)	0.56 (7.96)
	Overall width	mm (ft-in)	3470 (11' 5")	3570 (11' 9")	3670 (12' 0")	3580 (11' 9")

★ : Double grouser

3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	2 EA
Track rollers	9 EA
Track shoes	48 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
700 mm double grouser	Option	B
800 mm triple grouser	Option	C
800 mm triple grouser (long reach)	Standard	C

※ Table 2

Category	Applications	Precautions
A	Rocky ground, river beds, normal soil	· Travel at low speed on rough ground with large obstacles such as boulders or fallen trees or a wide range of general civil engineering work
B	Normal soil, soft ground	· 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	Hyundai HM8.3
Type	4-cycle turbocharged, charge air cooled diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	6 cylinders, in-line
Firing order	1-5-3-6-2-4
Combustion chamber type	Direct injection type
Cylinder bore × stroke	114 × 134.9 mm (4.49" × 5.31")
Piston displacement	8290 cc (506 cu in)
Compression ratio	18 : 1
Rated net horse power (SAE J1349)	245 Hp (183 kW) at 2200 rpm
Rated gross horse power (SAE J1995)	250 Hp (186 kW) at 2200 rpm
Maximum torque	124 kgf · m (899 lbf · ft) at 1300 rpm
Engine oil quantity	26.5 ℓ (7.0 U.S. gal)
Wet weight	617 kg (1360 lb)
High idling speed	2457 ± 50 rpm
Low idling speed	850 ± 100 rpm
Rated fuel consumption	151 g/Hp · hr at 1400 rpm
Starting motor	24 V-7.2 kW
Alternator	24 V-90 A
Battery	2 × 12 V × 150 Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 154 cc/rev
Maximum pressure	350 kgf/cm^2 (4980 psi) [380 kgf/cm^2 (5400 psi)]
Rated oil flow	2 × 285 ℓ/min (75.3 U.S. gpm / 62.7 U.K. gpm)

[ ] : Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15 cc/rev
Maximum pressure	40 kgf/cm^2 (570 psi)
Rated oil flow	27.75 ℓ /min (7.3 U.S. gpm/7.1 U.K. gpm)

4) MAIN CONTROL VALVE

Item		Specification
Type		10 spools
Operating method		Hydraulic pilot system
Main relief valve pressure		350 kgf/cm^2 (4980 psi) [380 kgf/cm^2 (5400 psi)] *1 350 kgf/cm^2 (4980 psi) [Not applied power boost]
Port relief valve pressure	Boom	400 kgf/cm^2 (5690 psi)
	Arm	400 kgf/cm^2 (5690 psi), *1 250 kgf/cm^2 (3560 psi)
	Bucket	400 kgf/cm^2 (5690 psi), *1 270 kgf/cm^2 (3840 psi)

[ ] : Power boost *1 : Long reach only

5) SWING MOTOR

Item	Specification
Type	Axial piston motor
Capacity	156.9 cc/rev
Relief pressure	300 kgf/cm^2 (4270 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	84.4 kgf · m (610 lbf · ft) over
Brake release pressure	36.6 kgf/cm^2 (519 psi) below
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Capacity	282.6/156.9 cc/rev
Relief pressure	350 kgf/cm^2 (4980 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	134 kgf · m (969 lbf · ft)
Brake release pressure	17 kgf/cm^2 (242 psi)
Reduction gear type	2-stage planetary

7) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Stroke	Ø140 × 1465 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Stroke	Ø150 × 1765 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Stroke	Ø135 × 1185 mm
	Cushion	Extend only
Bucket cylinder (long reach)	Bore dia × Stoke	Ø100 × 870 mm
	Cushion	Extend only

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

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

8) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
HX300S L	Standard	600 mm (24")	0.58 kgf/cm² (8.27 psi)	48	3200 mm (10' 6")
	Option	700 mm (28")	0.51 kgf/cm² (7.22 psi)	48	3300 mm (10' 10")
		800 mm (32")	0.45 kgf/cm² (6.40 psi)	48	3400 mm (11' 1")
HX300S L LONG REACH	Standard	800 mm (32")	0.49 kgf/cm² (6.96 psi)	48	3400 mm (11' 2")
HX300S L HIGH WALKER	Standard	600 mm (24")	0.63 kgf/cm² (8.89 psi)	48	3470 mm (11' 5")
	Option	700 mm (28")	0.55 kgf/cm² (7.76 psi)	48	3570 mm (11' 9")
		800 mm (32")	0.48 kgf/cm² (6.87 psi)	48	3670 mm (12' 0")
		★ 700 mm (28")	0.56 kgf/cm² (7.96 psi)	48	3580 mm (11' 9")

★ : Double grouser

9. RECOMMENDED OILS

HYUNDAI 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 HYUNDAI and, therefore, will meet the highest safety and quality requirements.

We recommend that you use only HYUNDAI genuine lubricating oils and grease officially approved by HYUNDAI.

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★1	26.5 (7.0)	★SAE 0W-40 ★SAE 0W-30 SAE 5W-30 SAE 10W-30 SAE 15W-40
Swing drive	Gear oil	11 (2.91)	★SAE 75W-90
Final drive		7.8×2 (2.1×2)	SAE 80W-90
Hydraulic tank	Hydraulic oil	Tank : 190 (50) System : 330 (87)	★ISO VG 15 ISO VG 32 ISO VG 46, HBHO VG 46★3 ISO VG 68
Fuel tank	Diesel fuel	500 (132)	★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	27 (7.1)	Ethylene glycol base permanent type (50 : 50) ★Ethylene glycol base permanent type (60 : 40)

SAE : Society of Automotive Engineers
API : American Petroleum Institute
ISO : International Organization for Standardization
NLGI : National Lubricating Grease Institute
ASTM : American Society of Testing and Material

★ : Cold region
Russia, CIS, Mongolia
★1 : Meet or exceeds API CH-4 grade
★2 : Soft water
City water or distilled water
★3 : Hyundai Bio Hydraulic Oil

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

※ Do not mix HYUNDAI 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.

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