INTRODUCTION

TO THE READER

- This manual is written for an experienced technician to provide technical information needed to maintain and repair this machine.

  · Be sure to thoroughly read this manual for correct product information and service procedures.
  · If you have any questions or comments regarding the contents of this manual.

please contact:

Technical Document Center
Hitachi Construction Machinery Co. Ltd.
TEL: 81-298-32-7173
FAX: 81-298-31-1162

ADDITIONAL REFERENCES

- Please refer to the materials listed below in addition to this manual.

  · The Operator's Manual
  · The Parts Catalog
  · Operation Manual of the Engine
  · Parts Catalog of the Engine
  · Hitachi Training Material

MANUAL COMPOSITION

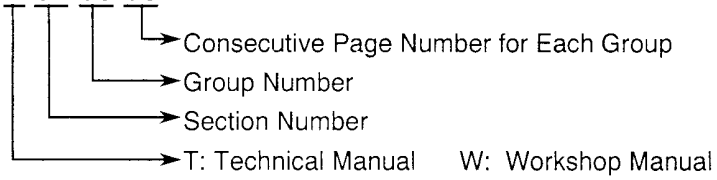
- This manual consists of two portions: the T/M (Technical Manual) portion and the W/M (Workshop Manual) portion.
  At the beginning of each section, a tab fixed separator is inserted to help in opening sections needed. Green tabs are used for the sections in the T/M portion and yellow tabs for those in the W/M portion.
  · Information included in the T/M portion:
  technical information needed for redelivery and delivery, operation and activation of all devices and systems, operational performance tests, and troubleshooting procedures.

  · Information included in the W/M portion:
  technical information needed for maintenance and repair of the machine, tools and devices needed for maintenance and repair, maintenance standards, and removal/installation and assemble/disassemble procedures.

PAGE NUMBER

- Each page has a number, located on the center lower part of the page, and each number contains the following information:

Example: T 01-03-05



SAFETY ALERT SYMBOL AND HEADLINE NOTATIONS

In this manual, the following safety alert symbol and signal words are used to alert the reader to the potential for personal injury or machine damage.

⚠ This is the safety alert symbol. When you see this symbol, be alert to the potential for personal injury.
Never fail to follow the safety instructions prescribed along with the safety alert symbol.
The safety alert symbol is also used to draw attention to component/part weights.
To avoid injury and damage, be sure to use appropriate lifting techniques and equipment when lifting heavy parts.

- ⚠ **CAUTION:** indicated a potentially hazardous situation which could, if not avoided, result in personal injury or death.
- **IMPORTANT:** indicates a situation which, if not avoided, could result in damage to the machine.
- *NOTE:* indicates supplementary technical information or know-how.

UNITS USED

- SI Units (International System of Units) are used in this manual.
  MKSA system units and English units are also indicated in parentheses just behind SI units.

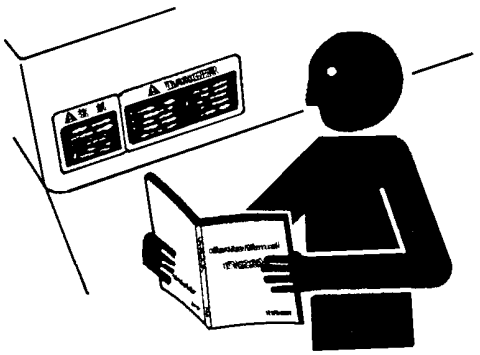
  Example: 24.5 MPa (250 kgf/cm^2, 3 560 psi)

  A table for conversion from SI units to other system units is shown below for reference purposes.

Quantity	To Convert From	Into	Multiply By	Quantity	To Convert From	Into	Multiply By
Length	mm	in	0.039 37	Pressure	MPa	kgf/cm^2	10.197
	mm	ft	0.003 281		MPa	psi	145.0
Volume	L	US gal	0.264 2	Power	kW	PS	1.360
	L	US qt	1.057		kW	HP	1.341
	m^3	yd^3	1.308	Temperature	°C	°F	°C×1.8+32
Weight	kg	lb	2.205	Velocity	km/h	mph	0.621 4
Force	N	kgf	0.101 97		min^{-1}	rpm	1.0
	N	lbf	0.224 8	Flow rate	L/min	US gpm	0.264 2
Torque	N·m	kgf·m	1.019 7		mL/rev	cc/rev	1.0
	N·m	lbf·ft	0.737 5				

FOLLOW SAFE PROCEDURES

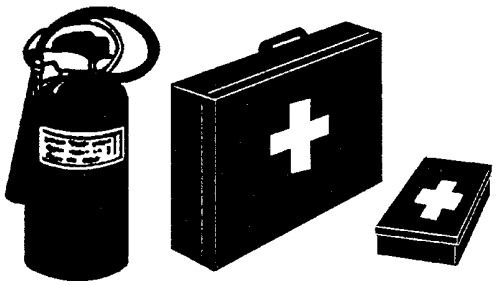
- Safety First
  - This safety-alert symbol ⚠ warns you of the potential for personal injury.
    Be sure to take all recommended precautions seriously and follow safe operating procedures and practices.
  - Be sure to thoroughly read, understand and comply with the safety precautions of this manual and of the operator's manual.



SA-003

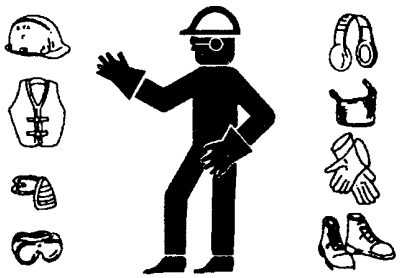
PRECAUTIONS FOR SERVICE WORK

- Prepare for Emergencies
  - Be prepared if a fire starts or if an accident occurs.



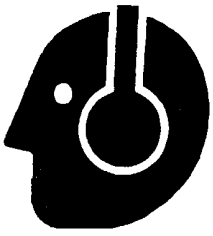
SA-020

- Wear Protective Clothing
  - Wear close fitting clothing and safe equipment appropriate for the job.
  - Do not wear a necktie, scarf, loose clothing, or necklace when you work near machine tools or moving parts. If these items get caught in the machine, severe injury could result.
  - Remove rings and other jewelry, to help avoid electrical shocks and entanglement in moving parts.



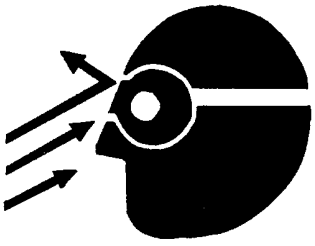
SA-023

- 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 constant or uncomfortably loud noise.



SA-024

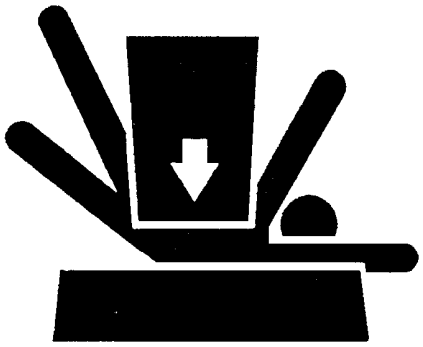
- Protect Against Flying Debris
  - Flying pieces of metal or debris are very dangerous, and can cause serious personal injury.
  - Be sure to wear goggles or safety glasses before performing any service work in which flying pieces of metal or debris are anticipated, especially before removing/installing pins.



SA-022

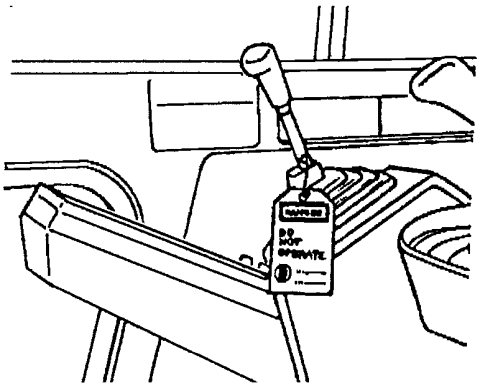
PREPARATIONS FOR SERVICE WORK

- Before working on the machine:
  - Park the machine on a firm, level surface.
  - Lower the bucket to the ground.
  - Run the engine at slow idle without load for 3 minutes.
  - Turn the key switch to the OFF position to stop the engine. Remove the key from the switch.
  - Pull the pilot control shut-off lever to the LOCK position.
  - Allow the engine to cool down.



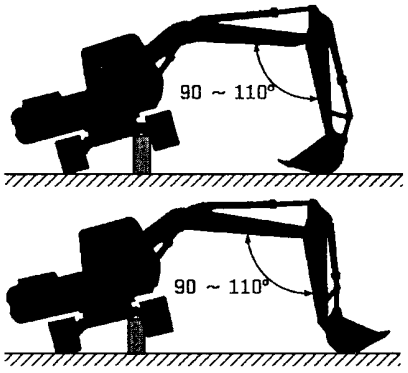
SA-027

- Warn Others of Service Work
  - Unexpected machine movement can result in serious injury.
  - Before performing any work on the excavator, attach a clearly visible "Do Not Operate" tag on the control levers and/or on the cab door.



SA-041

- Support the 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 a raised attachment, be sure to securely support the machine or the attachment, using the provided cylinder supports or solid wooden blocks.
  - If the machine must be jack-up, keep a 90 to 110° angle between the boom and arm.
  - If you must park the machine on a slope, take the following measures in addition to the ordinary parking procedure:



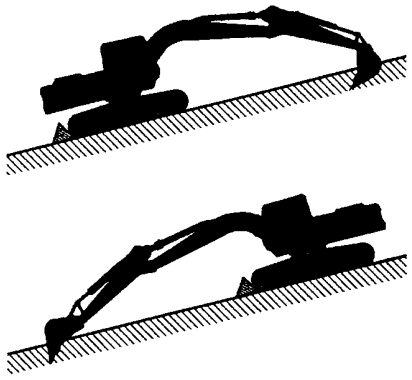
SA-043

Before servicing the travel system

Block both tracks and lower the bucket to the ground, thrusting the bucket teeth into the ground, as shown.

Before servicing the swing system

Position the front attachment down the slope and lower the blade and bucket to the ground, thrusting the bucket teeth and blade into the ground, as shown, so as to prevent the upperstructure from swinging downhill unexpectedly.



SA-311

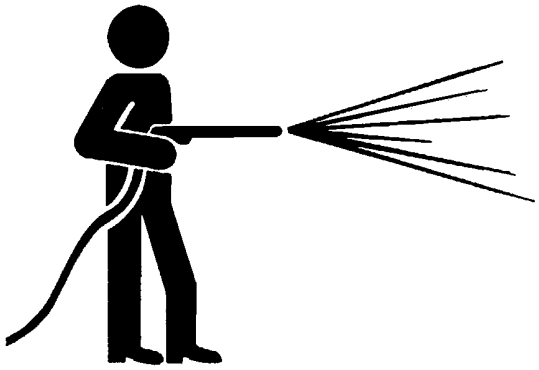
PRACTICE SAFE MAINTENANCE

- Fully understand the procedures of the service to be done before starting work. Also, make sure that your co-workers understand the service procedures as well.

- Prepare and Clean the Work Area
  - · Select a firm, level surface, protected from wind and rain.
  - · If working under the machine is required, be sure to bring the machine to a shop where a suitable pit is provided.
  - · Before starting any service work, clean the work area. Remove any objects that may be a safety hazard to the service personal or bystanders.
  - · Remove any buildup of grease, oil, paints, or debris.

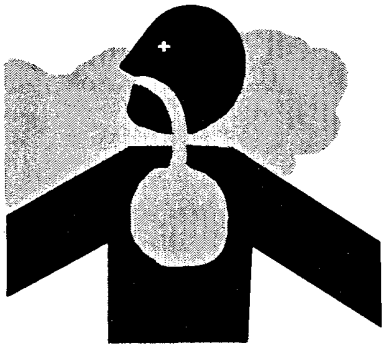
- Park the Machine Safely
  - · Refer to the PREPARATION FOR SERVICE WORK section on the previous page.

SA-028



SA-033

- Beware of Exhaust Fumes
  Engine exhaust fumes can cause sickness or death.
  - · If you must operate inside a building, be sure 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.

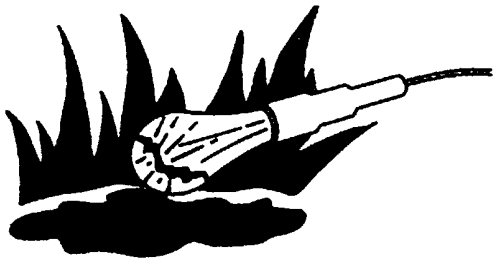


SA-016

- 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 that the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.

- Allow the engine and the hydraulic oil to cool before starting any service work.

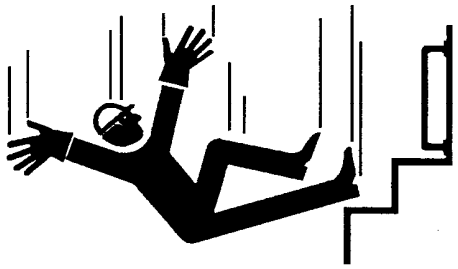
- Disconnect the battery ground cable (−) before servicing the electrical system or welding on the machine.



SA-037

USE HANDHOLDS AND STEPS

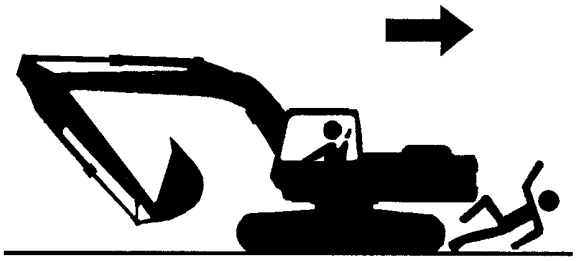
- Falling is one of the major causes of personal injury.
  - When getting on and off the machine, always maintain a three-point contact with the steps and handrails, and face the machine.
  - Do not use any controls as handholds.
  - Never jump on or off the machine. Never mount or dismount a moving machine.
  - Be careful of slippery conditions on platforms, steps, and handrails when getting on or off the machine.



SA-006

PRECAUTIONS FOR MACHINE OPERATION

- Never lubricate or service the machine while it is moving.
- If a maintenance procedure must be performed with the engine running, do not leave the machine unattended.
- Take precautions when operating the machine
  - Be sure to start the engine only while seated in the operator's seat.
  - Always be alert for bystanders moving into the work area. Use the horn or other signal to warn bystanders before starting the engine and before moving the machine.
  - Machines experiencing trouble may move in unexpected ways. Be sure to operate the machine slowly while observing machine movements closely.
  - Use a signal person when backing up, if your view is obstructed. Always keep the signal person in view.
  - Learn the meaning of all flags, signs, and markings used on the job, and confirm who has the responsibility for signaling.
- Be sure to remain seated in the operator's seat while operating the machine.
- Keep riders off the machine. Only allow the operator on the machine.



SA-007

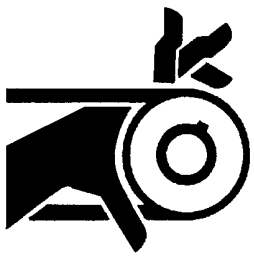
USE TOOLS PROPERLY

- Use tools appropriate for the work to be done.
  - Makeshift tools, parts, and procedures can create safety hazards.
  - For loosening and tightening hardware, use the correct size tools to avoid injury caused by slipping wrenches.
  - Use only recommended replacement parts. (See the parts catalog.)

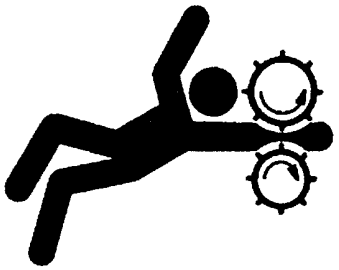
SA-040

STAY CLEAR OF MOVING PARTS

- Entanglement in moving parts can cause serious injury. Never attempt to touch any moving parts with your hands.
- To prevent accidents, use extra care and take necessary safety measures when working around moving parts.



SA-026



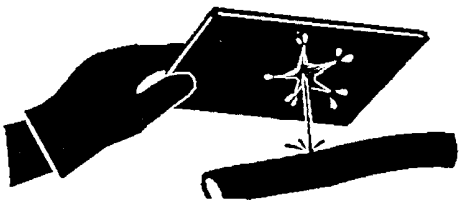
SA-038

AVOID HIGH-PRESSURE FLUIDS

- If escaping fluid under pressure penetrates the skin, or if it is splashed into the eyes, serious personal injury may result.
  - Avoid this hazard by relieving pressure before disconnecting hydraulic or other lines. Be sure to retighten all connections before reapplying pressure.
  - Search for leaks with a piece of cardboard, not your hands. Protect all body parts from high pressure fluids.
  - Be sure to wear a face shield or goggles to protect your eyes 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.

SA-031



SA-044

HANDLE FLUIDS SAFELY - AVOID FIRES

- Handle fuel with care; it is highly flammable. Also, be sure to handle flammable lubricants safely.
  - Do not smoke while refueling the machine. Do not refuel near open flame or sparks.
  - Always stop the engine before refueling the machine.
  - Fill the fuel tank outdoors.

SA-018

  - Store flammable fluids well away from fire hazards.
  - Make sure the machine is clean of trash, grease, and debris.
  - Do not store oily rags; they can ignite and burn spontaneously.

SA-019

HANDLE BATTERIES SAFELY

- 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 attempt to charge a frozen battery; it may explode. Warm the battery to 16 °C (60 F°) first.

SA-032

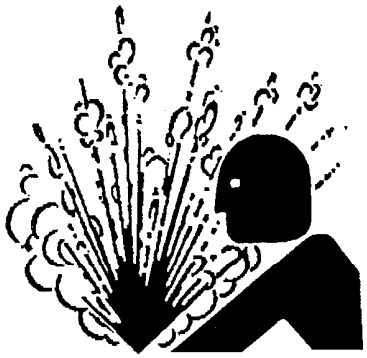
- Sulfuric acid in battery electrolyte is poisonous.
  - Fill batteries in a well-ventilated area.
  - Wear eye protection and rubber gloves.
  - Avoid breathing fumes when adding electrolyte.
  - Avoid spilling or dripping electrolyte.

- Follow proper jump start procedures. Refer to the jump start section of the Operator's Manual.

SA-036

SERVICE COOLING SYSTEM SAFELY

- Explosive release of fluids from the pressurized cooling system can cause serious burns.
  - Always run the engine at slow idle for a few minutes before shutting off the engine.
  - Only remove the radiator cap when it is cool enough to touch with the bare hands.
  - Be sure to loosen the radiator cap to release system pressure before removing it.



SA-039

REMOVE PAINT BEFORE WELDING OR HEATING

- Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch. Do all welding or heating work outside or in a well-ventilated area. Dispose of paint and solvent properly.
- Avoid potentially toxic fumes and dust.
- 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 container and other flammable material from area.
  - Allow fumes to disperse for at least 15 minutes before welding or heating.

SA-029

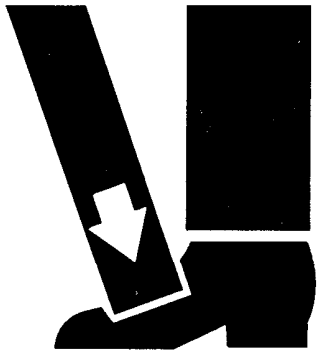
AVOID HEATING NEAR PRESSURIZED FLUID LINES

- 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 temporary fire-resistant guards to protect hoses or other materials.

SA-030

USE PROPER LIFTING EQUIPMENT

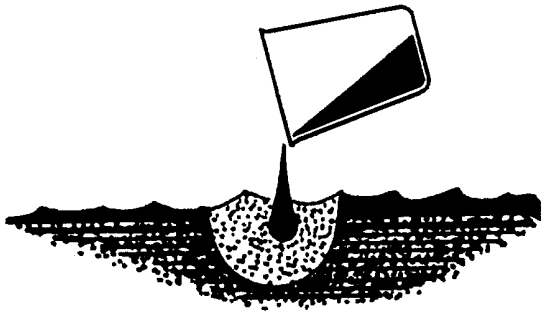
- Lifting heavy components incorrectly can result in severe injury or machine damage.
  - Refer to the component weights listed in this manual before lifting heavy components.
  - When using a crane, confirm that the lifting capacity of the crane and hoisting accessories to be used are appropriate for the work to be done, and that the crane is maintained in good condition.



SA-286

DISPOSE OF FLUIDS PROPERLY

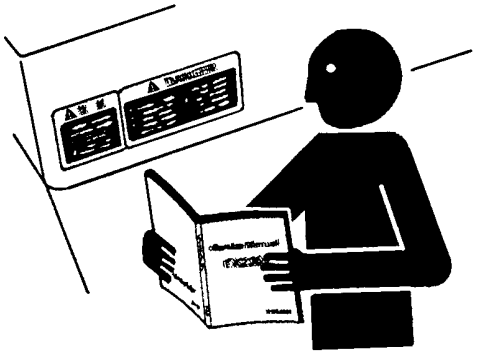
- Improper disposal of fluids can harm the environment and the ecology.
  - Use proper containers when draining fluids.
  - DO NOT pour oil into the ground, down a drain, or into a stream, pond, or lake.
- Observe all relevant environmental protection regulations when disposing of oil, fuel, coolant, brake fluid, filters, batteries, and other harmful waste.



SA-035

REPLACE SAFETY SIGNS

- Maintain all safety signs, so that they are intact and legible.
  - Replace any missing safety signs.
  - If safety signs are damaged, replace them with new ones.
  - See the machine Operator's Manual for correct safety sign placement.



SA-003

BEFORE RETURNING THE MACHINE TO THE CUSTOMER

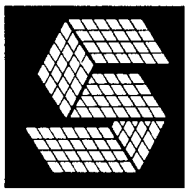
- After maintenance or repair work is complete, confirm that:
  - The machine is functioning properly, especially the safety systems.
  - Worn or damaged parts have been repaired or replaced

SA-005

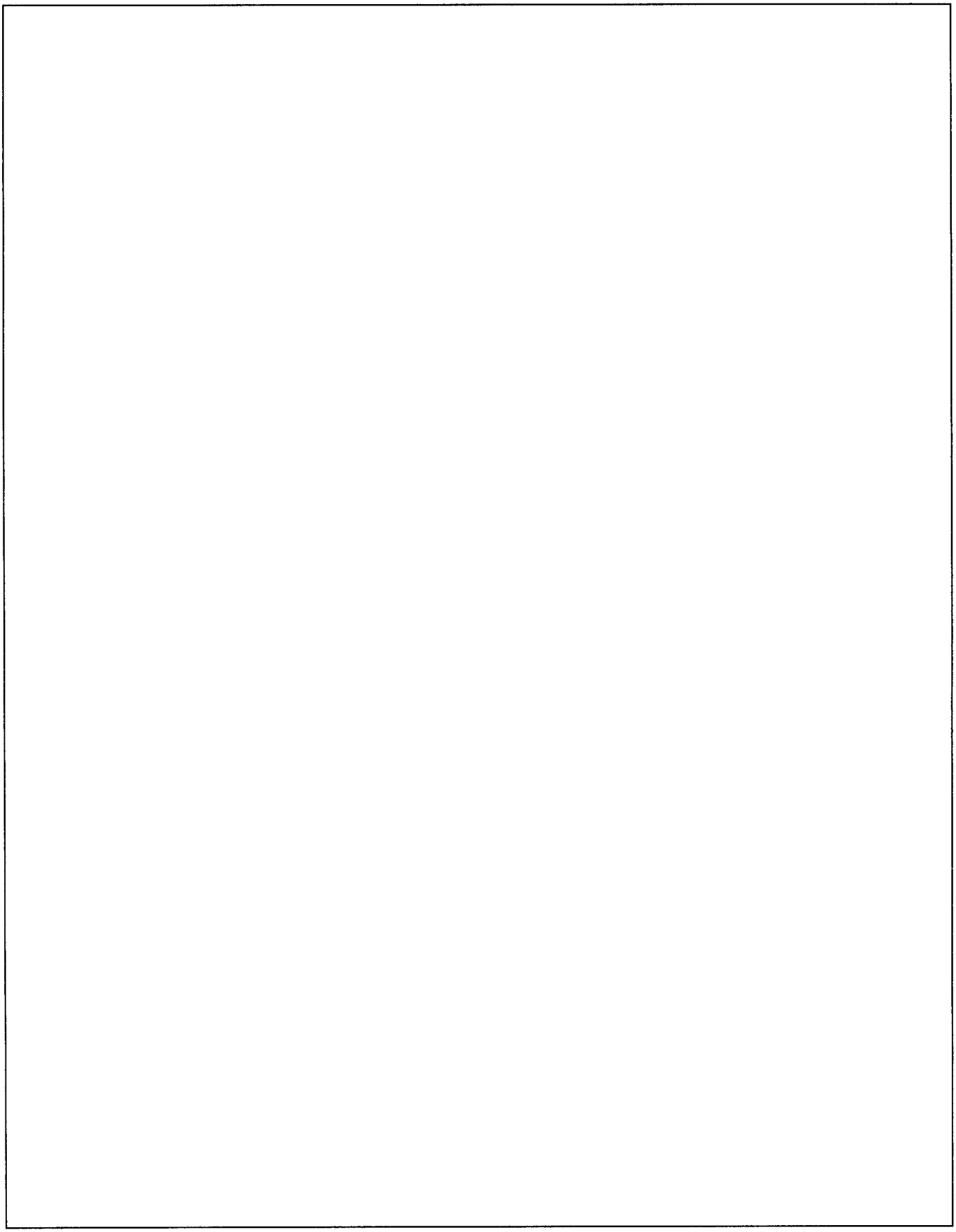
Technical Manual

EX300-3

SECTION 01
SPECIFICATIONS



CONTENTS



FOREWORD

The hydraulic excavator consists of three main components. They are the FRONT ATTACHMENT, UPERSTRUCTURE, and UNDERCARRIAGE.

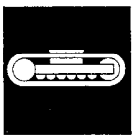
FRONT ATTACHMENT

1— Bucket Cylinder
2— Arm Cylinder
3— Boom Cylinder
4— Boom
5— Arm
6— Bucket

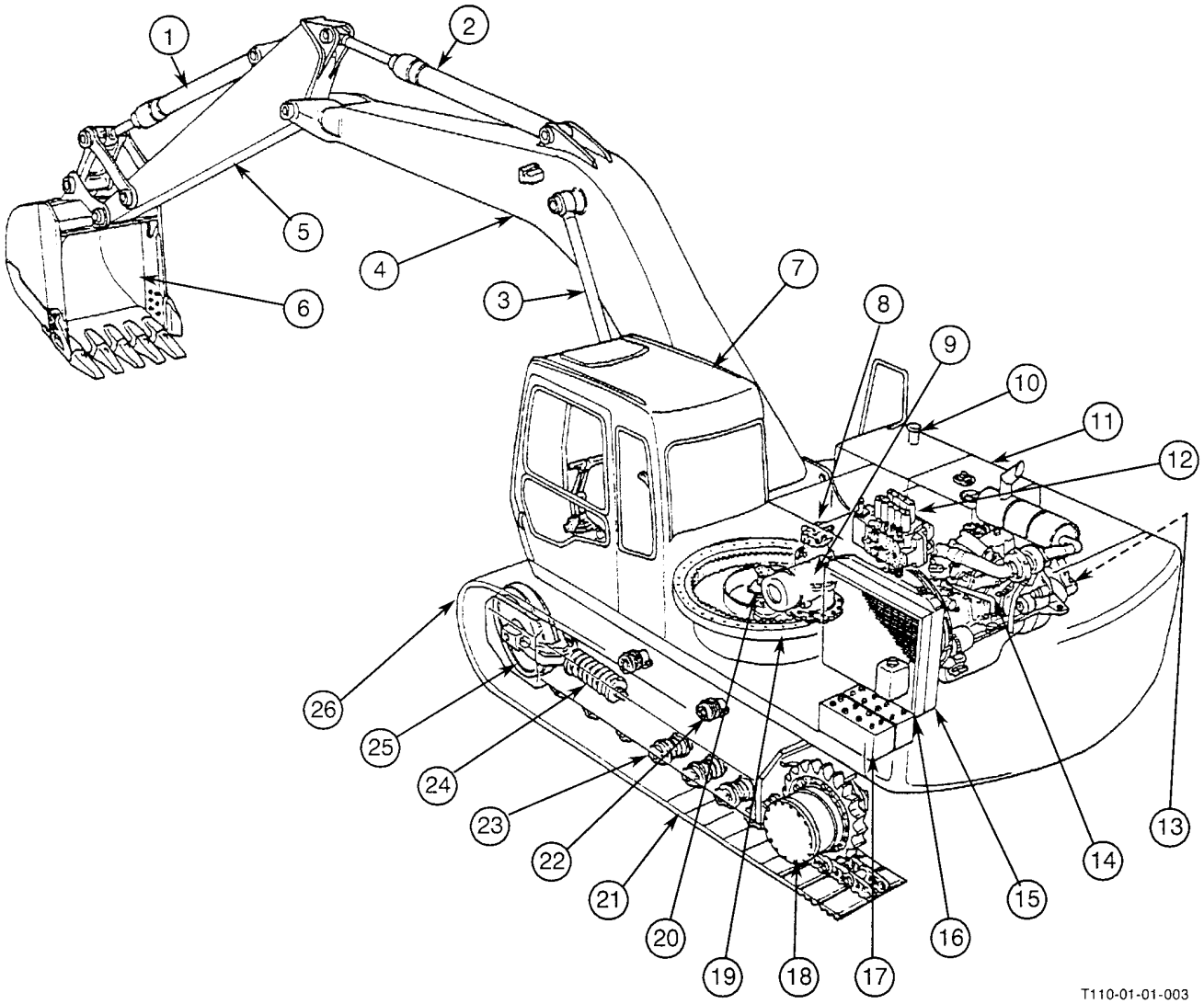
UPERSTRUCTURE

7— Cab
8— Swing Device
9— Air Cleaner
10— Fuel Tank
11— Hydraulic Oil Tank
12— Control Valve
13— Pump Device
14— Engine
15— Radiator
16— Oil Cooler
17— Battery

UNDERCARRIAGE



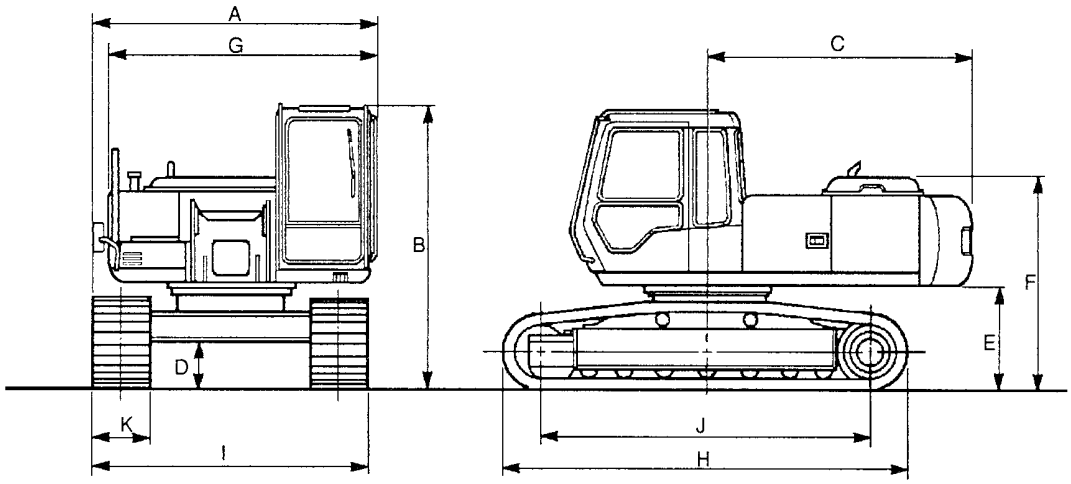
18— Travel Device
19— Swing Bearing
20— Center Joint
21— Shoe
22— Upper Roller
23— Lower Roller
24— Track Adjuster
25— Front Idler
26— Track Link



T110-01-01-003

SPECIFICATIONS

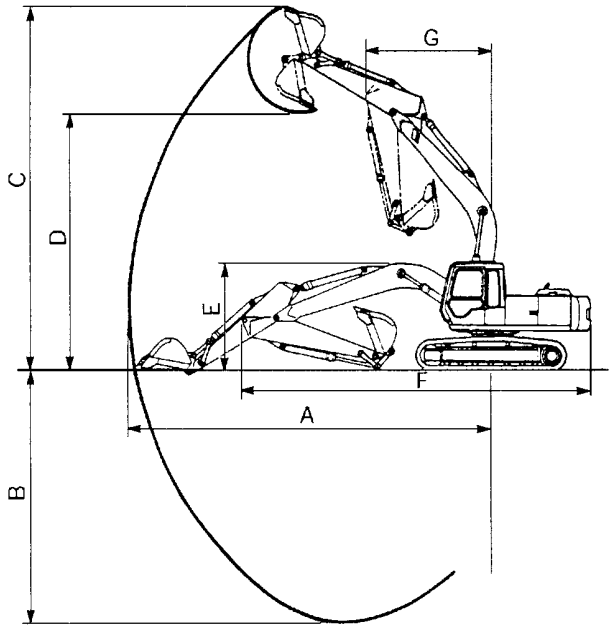
Model	EX300-3	EX300LC-3
Arm Length	With 3.20 m (10 ft 6 inch) Arm	
Bucket Capacity (Heaped)	PCSA 1.38 m^3 (1.8 yd^3),1.2 m^3	
Operating Weight	28 600 kg (63 100 lb)	29 300 kg (64 600 lb)
Base Machine Weight	22 600 kg (49 800 lb)	23 300 kg (51 400 lb)
Engine	ISUZU 6SD1-TPD 162 kW / 2 000 min^{-1} (220 PS / 2 000 rpm)	
A: Over Width (Excluding back mirrors)	3 190 mm (10 ft 6 inch)	3 190 mm (10 ft 6 inch)
B: Cab Height	3 010 mm (9 ft 11 inch)	3 010 mm (9 ft 11 inch)
C: Rear End Swing Radius	3 300 mm (10 ft 10 inch)	3 300 mm (10 ft 10 inch)
D: Minimum Ground Clearance	※500 mm (20 inch)	※500 mm (20 inch)
E: Counterweight Clearance	※1 175 mm (3 ft 10 inch)	※1 175 mm (3 ft 10 inch)
F: Engine Cover Height	※2 430 mm (8 ft 0 inch)	※2 430 mm (8 ft 0 inch)
G: Overall Width of Upperstructure	2 880 mm (9 ft 5 inch)	2 880 mm (9 ft 5 inch)
H: Undercarriage Length	4 570 mm (15 ft 0 inch)	4 870 mm (16 ft 0 inch)
I: Undercarriage Width	3 190 mm (10 ft 6 inch)	3 190 mm (10 ft 6 inch)
J: Sprocket Center to Idler Center	3 710 mm (12 ft 2 inch)	4 010 mm (13 ft 2 inch)
K: Track Shoe Width	600 mm (24 inch) (Grouser shoe)	
Ground Pressure	59 kPa (0.60 kgf/cm^2)	54 kPa (0.56 kgf/cm^2)
Swing Speed	12 min^{-1} (rpm)	12^{-1} (rpm)
Travel Speed (Fast / Medium / Slow)	5.5 / 3.9 / 2.6 km/h (3.4 / 2.4 / 1.6 mph)	
Gradeability	35° (tan θ= 0.70)	
Arm Digging Force	134 kN (13 700 kgf)	89 kN (9 100 kgf)
Bucket Digging Force	177 kN (18 100 kgf)	113 kN (11 500 kgf)



M107-11-001

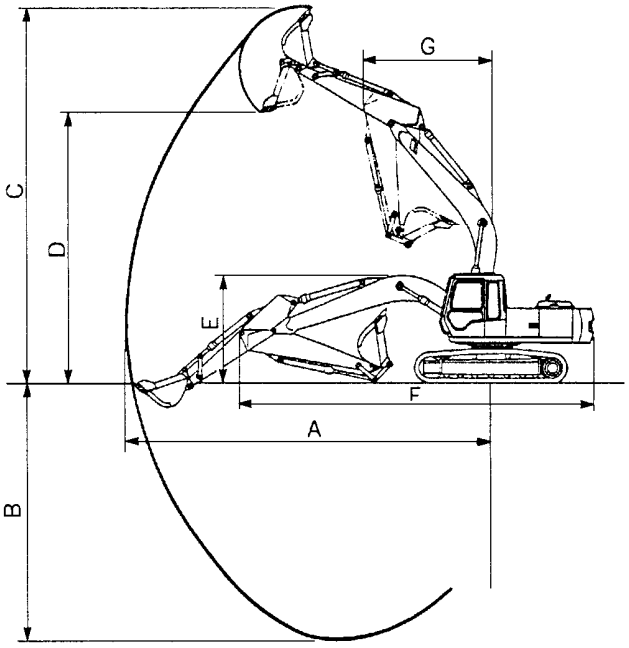
NOTE: ※ The dimensions do not include the height of the shoe lag.

WORKING RANGES · TRANSPORTATION



M107-11-003

Backhoe



M107-11-004

Face Shovel
(Reversed hoebucket)

Working Range (EX300-3, EX300LC-3)

Item \ Category	2.66 m (8 ft 9 in) Arm		3.20 m (10 ft 6 in) Arm		4.00 m (13 ft 1 in) Arm
	Backhoe	Shovel	Backhoe	Shovel	Backhoe
A: Maximum Digging Reach	10 570 mm (34 ft 8 in)	10 790 mm (35 ft 5 in)	11 100 mm (36 ft 5 in)	11 330 mm (37 ft 2 in)	11 860 mm (38 ft 11 in)
B: Maximum Digging Depth	*6 840 mm (22 ft 5 in)	*7 070 mm (23 ft 2 in)	*7 380 mm (24 ft 3 in)	*7 600 mm (24 ft 11 in)	*8 180 mm (26 ft 10 in)
C: Maximum Cutting Height	*9 850 mm (32 ft 4 in)	*10 360 mm (34 ft 0 in)	*10 220 mm (33 ft 6 in)	*10 670 mm (35 ft 0 in)	*10 600 mm (34 ft 9 in)
D: Maximum Dumping Height	*6 810 mm (22 ft 4 in)	*6 680 mm (21 ft 11 in)	*7 120 mm (23 ft 4 in)	*7 040 mm (23 ft 1 in)	*7 490 mm (24 ft 7 in)
E: Transport Height	3 410 mm (11 ft 2 in)	3 410 mm (11 ft 2 in)	3 200 mm (10ft 6 in)	3 200 mm (10ft 6 in)	3 490 mm (11 ft 5 in)
F: Overall Transport Length	11 060 mm (36 ft 3 in)	11 060 mm (36 ft 3 in)	10 940 mm (35 ft 11 in)	10 940 mm (35 ft 11 in)	11 010 mm (36 ft 1 in)
G: Minimum Swing Radius	4 540 mm (14 ft 11 in)	4 540 mm (14 ft 11 in)	4 450 mm (14 ft 11 in)	4 450 mm (14 ft 11 in)	4 380 mm (14 ft 4 in)

*NOTE: * The dimensions do not include the height of the shoe lug.*

SHOE TYPES AND APPLICATIONS

EX300-3

Shoe Width mm (in)	600 mm (24") Grouser Shoe	800 mm (31") Grouser Shoe	600 mm (24") Flat Shoe	910 mm (35") Triangular Shoe
Application	For Ordinary Ground (Standard)	For Weak Footing (Optional)	For Paved Footing (Optional)	For Weak Footing (Optional)
Operating Weight kg (lb)	28 600 (63 100)	29 500 (65 000)	29 700 (65 500)	30 000 (66 100)
Basic Machine Weight kg (lb)	22 600 (49 800)	23 500 (51 800)	23 700 (52 200)	24 000 (52 900)
Cab Height mm (ft·in)	3 010 (9'11")	3 020 (9'11")	3 030 (9'11")	3 080 (10'1")
Minimum Ground Clearance mm (ft·in)	※500 (20")	※500 (20")	※540 (21")	※530 (21")
Undercarriage Length mm (ft·in)	4 570 (15'0")	4 580 (15'0")	4 610 (15'2")	4 720 (15'6")
Undercarriage Width mm (ft·in)	3 190 (10'6")	3 390 (11'1")	3 190 (10'6")	3 500 (11'6")
Ground Pressure kPa (kgf/cm^2) (psi)	59.0 (0.60) (8.5)	45.0 (0.46) (6.5)	61.0 (0.62) (8.8)	41.0 (0.42) (6.0)

EX300LC-3

Shoe Width mm (in)	600 mm (24") Grouser Shoe	800 mm (31") Grouser Shoe	600 mm (24") Flat Shoe	910 mm (35") Triangular Shoe
Application	For Ordinary Ground (Standard)	For Weak Footing (Optional)	For Paved Footing (Optional)	For Weak Footing (Optional)
Operating Weight kg (lb)	29 300 (69 600)	30 200 (66 600)	30 500 (67 200)	30 800 (67 900)
Basic Machine Weight kg (lb)	23 300 (51 400)	24 200 (53 400)	24 500 (54 000)	24 800 (54 700)
Cab Height mm (ft·in)	3 010 (9'11")	3 020 (9'11")	3 030 (9'11")	3 080 (10'1")
Minimum Ground Clearance mm (ft·in)	※500 (20")	※500 (20")	※540 (21")	※530 (21")
Undercarriage Length mm (ft·in)	4 870 (16'0")	4 880 (16'0")	4 910 (16'1")	5 020 (16'6")
Undercarriage Width mm (ft·in)	3 190 (10'6")	3 390 (11'1")	3 190 (10'6")	3 500 (11'6")
Ground Pressure kPa (kgf/cm^2) (psi)	55.0 (0.56) (8.0)	42.0 (0.43) (6.1)	57.0 (0.58) (8.3)	38.0 (0.39) (5.6)

NOTE: (1) The specifications for the front-end attachment are for 2.66 m (8 ft 9 in) arm or 3.20 m (10 ft 6 in) arm with PCSA 1.38 m^3 (1.8 yd^3) bucket.

(2) 800 mm (31 in) grouser shoe, 600 mm (24 in) flat shoe and 910 mm (35 in) triangular shoe should not be used on gravel or rocky ground.

(3) ※ The dimensions do not include the height of the shoe lug.

WEIGHT

Unit: kg (lb)

Model		EX300-3	EX300LC-3
Applicable Serial No.		15K 07 001 and more	←
Upperstructure		12 500 (27 558)	←
· Main Frame		2 570 (5 665)	←
· Engine Assembly		945 (2 085)	←
· Pump Device		195 (430)	←
· Control valve		178 (390)	←
· Swing Device		355 (785)	←
· Hydraulic Oil Tank		175 (385)	←
· Fuel Tank		112 (245)	←
· Counterweight		6 700 (14 770)	←
· Cab		230 (505)	←
Undercarriage		6 050 (13 340)	6 650 (14 660)
· Track Frame		3 090 (6 810)	3 450 (7 605)
· Swing Bearing		366 (805)	←
· Travel Device		448 (990)×2	←
· Center Joint		26 (58)	←
· Track Adjuster		145 (320)×2	←
· Front Idler		164 (360)×2	←
· Upper Roller		20 (45)×4	←
· Lower Roller		54 (120)×16	54 (120)×18
Track-Link Assembly (600 mm Grouser shoe)		1 730 (3 815)×2	1 845 (4 065)×2
Front Attachment (6.4 m Boom, 3.2 m Arm, 1.2 m^3 (PCSA heaped) Bucket)		6 080 (13 405)	←
· 6.4 m Boom		2 110 (4 650)	←
· 3.2 m Arm		1 030 (2 270)	←
· 2.66 m Arm		940 (2 070)	←
· 1.2 m^3 Bucket (PCSA heaped)		1 080 (2 380)	←
· Boom Cylinder		299 (660)×2	←
· Arm Cylinder		439 (970)	←
· Bucket Cylinder		259 (570)	←
· Bucket Link A		130 (280)	←
· Bucket Link B	Right Side	29 (64)	←
	Left Side	33 (73)	←

SERVICE REFILL CAPACITIES

Description		liters	US gal	Reference
Fuel Tank		510	135	
Engine Coolant		33.5	8.9	
Engine Oil		35	9.2	
Pump Transmission		1.4	0.4	
Swing Reduction Gears		17	4.5	
Travel Reduction Gears		7.8×2	2.1×2	
Hydraulic System		310	81.9	
Swing Gear		12	3.2	
Front Idler		0.3× 2	0.079× 2	Engine Oil SAE No.30 (CD Class)
Upper Roller		0.075×4	0.020×4	↑
Lower Roller	EX300-3	0.042×16	0.011×16	↑
	EX300LC-3	0.042×18	0.011×18	↑

FUEL

Tank capacity 510 liters (135 US gal

Parts	Quantity	Int)						
		8	50	100	250	500	1 000	2 000
1. Drain Fuel Tank Sump	1	▒						
2. Check Water Separator	1		▒					
3. Replace Fuel Filter	1					▒		
4. Clean Feed Pump Strainer	1						▒	

Recommended Fuel

Use high quality DIESEL FUEL only (JIS K-2204) (ASTM 2-D). Kerosene must NOT be used.

IMPORTANT: Be careful not to allow dust, dirt, water or other foreign materials into the fuel system.