

SHOP MANUAL

KOMATSU

PC340, PC340LC-6K PC340NLC-6K

MACHINE MODEL

SERIAL NUMBER

PC340-6K

PC340LC-6K

PC340NLC-6K



DOWNLOAD



up, K34001 and up

up, K34001 and up

K32001 and up, K34001 and up

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.
- PC340-6K mount the SAA6D108E-2 engine. For details of the engine, see the Engine Shop Manual.

CONTENTS


	No. of page
01 GENERAL	01-1
10 STRUCTURE AND FUNCTION	10-1
20 TESTING AND ADJUSTING	20-1
30 DISASSEMBLY AND ASSEMBLY	30-1
40 MAINTENANCE STANDARD	40-1
90 OTHERS	90-1

SAFETY

SAFETY NOTICE

IMPORTANT SAFETY NOTICE

Proper service and repairs extremely important for safe machine operation. The service and repair techniques recommended by Komatsu and described in this manual are both specially designed by Komatsu for the specific purpose.

To prevent injury to workers, the symbol  is used to mark safety precautions in this manual. The cautions accompanying these symbols should always be followed carefully. If any dangerous situation arises or may possibly arise, first consider safety, and take the necessary actions to deal with the situation.

GENERAL PRECAUTIONS

Mistakes in operation are extremely dangerous. Read the Operation and Maintenance carefully BEFORE operating the machine.

1. Before carrying out any greasing or repairs, read all the precautions given on the decals which are fixed to the machine.
2. When carrying out any operation, always wear safety shoes and helmet. Do not wear loose work clothes, or clothes with buttons missing.
 - Always wear safety glasses when hitting parts with a hammer.
 - Always wear safety glasses when grinding parts with a grinder, etc.
3. If welding repairs are needed, always have a trained, experienced welder carry out the work. When carrying out welding work, always wear welding gloves, apron, glasses, cap and other clothes suited for welding work.
4. When carrying out any operation with two or more workers, always agree on the operating procedure before starting. Always inform your fellow workers before starting any step of the operation. Before starting work, hang UNDER REPAIR signs on the controls in the operator's compartment.
5. Keep all tools in good condition and learn the correct way to use them.

6. Decide a place in the repair workshop to keep tools and removed parts. Always keep the tools and parts in their correct places. Always keep the work area clean and make sure that there is no dirt or oil on the floor. Smoke only in the areas provided for smoking. Never smoke while working.

PREPARATIONS FOR WORK.

7. Before adding the oil or making any repairs park the machine on hard, level ground, and block the wheels or tracks to prevent the machine from moving.
8. Before starting work, lower blade, ripper, bucket or any other work equipment to the ground. If this is not possible, insert the safety pin or use blocks to prevent the work equipment from falling. In addition, be sure to lock all the control levers and hang warning signs on them.
9. When disassembling or assembling, support the machine with blocks, jacks or stands before starting work.
10. Remove all mud and oil from the steps or other places used to get on and off the machine. Always use the handrails, ladders or steps when getting on or off the machine. Never jump on or off the machine. If it is impossible to use the handrails, ladders or steps, use a stand to provide safe footing.

PRECAUTIONS DURING WORK

11. When removing the oil filter cap, drain plug or hydraulic pressure measuring plugs, loosen them slowly to prevent the oil from spurting out. Before disconnecting or removing components of the oil, water or air circuits, first remove the pressure completely from the circuit.
12. The water and oil in the circuits are hot when the engine is stopped, so be careful not to get burned.
Wait for the oil and water to cool before carrying out any work on the oil or water circuits.
13. Before starting work, remove the leads from the battery. Always remove the lead from the negative (-) terminal first.
14. When raising heavy components, use a hoist or crane.
Check that the wire rope, chains and hooks are free from damage.
Always use lifting equipment which has ample capacity.
Install the lifting equipment at the correct places.
Use a hoist or crane and operate slowly to prevent the component from hitting any other part.
Do not work with any part still raised by the hoist or crane.
15. When removing covers which are under internal pressure or under pressure from a spring, always leave two bolts in position on opposite sides. Slowly release the pressure, then slowly loosen the bolts to remove.
16. When removing components, be careful not to break or damage the wiring. Damaged wiring may cause electrical fires.
17. When removing piping, stop the fuel or oil from spilling out. If any oil or fuel drops onto the floor, wipe it up immediately. Fuel or oil on the floor can cause you to slip, or can even start fires.
18. As a general rule, do not use gasoline to wash parts. In particular, only use the minimum of gasoline when washing electrical parts.
19. Be sure to assemble all parts again in their original places.
Replace any damaged parts with new parts.
 - When installing hoses and wires, be sure that they will not be damaged by contact with other parts when the machine is being operated.
20. When installing high pressure hoses, make sure that they are not twisted. Damaged tubes are dangerous, so be extremely careful when installing tubes for high pressure circuits. Also, check that connecting parts are correctly installed.
21. When assembling or installing parts, always use the specified tightening torques. When installing protective parts such as guards, or parts which vibrate violently or rotate at high speed, be particularly careful to check that they are installed correctly.
22. When aligning two holes, never insert your fingers or hand. Be careful not to get your fingers caught in a hole.
23. When measuring hydraulic pressure, check that the measuring tool is correctly assembled for taking any measurements.
24. Take care when removing or installing the tracks of track-type machines. When removing the track, the track separates suddenly, so never let anyone stand at either end of the track.

FOREWORD GENERAL

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

This shop manual mainly contains the necessary technical information for operations performed in a service workshop. For ease of understanding, the manual is divided into the following chapters: these chapters are further divided into the each main group of components.

STRUCTURE AND FUNCTION

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

TESTING AND ADJUSTING

This section explains checks to be made before and after performing repairs, as well as adjustments to be made at completion of the checks and repairs. Troubleshooting charts correlating "problems" to "Causes" are also included in this section.

DISASSEMBLY AND ASSEMBLY

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

MAINTENANCE STANDARD

This section gives the judgement standards when inspecting disassembled parts.

NOTICE

The specifications contained in this shop manual are subject to change at any time and without any advance notice. Use the specifications given in the book with the latest date.

HOW TO READ THE SHOP MANUAL

VOLUMES

Shop manuals are issued as a guide to carrying out repairs. They are divided as follows:

Chassis volume: Issued for every machine model
Engine model: Issued for each engine series

Electrical volume: } Each issued as one
Attachments volume: } volume to cover all
 models

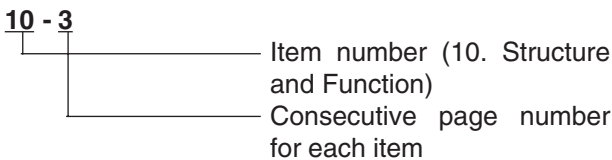
These various volumes are designed to avoid duplicating the same information. Therefore, to deal with all repairs for any model, it is necessary that chassis, engine, electrical and attachment volumes be available.

DISTRIBUTION AND UPDATING

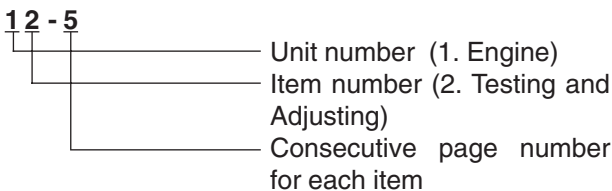
Any additions, amendments or other changes will be sent to KOMATSU distributors. Get the most up-to-date information before you start any work.

FILING METHOD

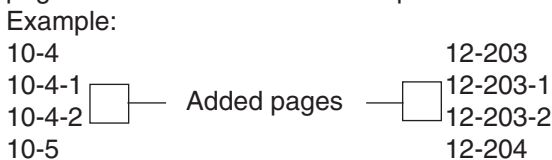
1. See the page number on the bottom of the page. File the pages in correct order.
2. Following examples show how to read the page number
 Example 1 (Chassis volume:)



Example 2 (Engine Volume:)



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



REVISED EDITION MARK

When a manual is revised, an edition mark (①, ②, ③, ...) is recorded on the bottom of the pages.

REVISIONS

Revised pages are shown in the LIST OF REVISED PAGES next to the CONTENTS page.

SYMBOLS

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

Symbol	Item	Remarks
	Safety	Special safety precautions are necessary when performing the work.
	Caution	Special technical precautions or other precautions for preserving standards are necessary when performing the work.
	Weight	Weight of parts of systems. Caution necessary when selecting hoisting wire, or when working posture is important, ect.
	Tightening torque	Places that require special attention for the tightening torque during assembly.
	Coat	Places to be coated with adhesives and lubricants, etc.
	Oil, water	Places where oil, water or fuel must be added, and the capacity.
	Drain	Places where oil or water must be drained, and quantity to be drained.

HOISTING INSTRUCTIONS

HOISTING

⚠ Heavy parts (25 kg or more) must be lifted with a hoist, etc. In the **DISASSEMBLY AND ASSEMBLY** section, every part weighing 25 kg or more is indicated with the symbol

- If a part cannot be smoothly removed from the machine by hoisting, the following checks should be made:
 - 1) Check for removal of all bolts fastening the part to the relative parts.
 - 2) Check for existence of another part causing interference with the part to be removed.

WIRE ROPES

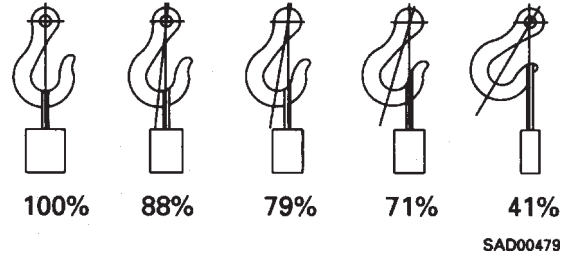
- 1) Use adequate ropes depending on the weight of parts to be hoisted, referring to the table below:

Wire ropes (Standard "Z" or "S" twist ropes without galvanizing)	
Rope diameter (mm)	Allowable load (tons)
10	1.0
11.2	1.4
12.5	1.6
14	2.2
16	2.8
18	3.6
20	4.4
22.4	5.6
30	10.0
40	18.0
50	28.0
60	40.0

★ The allowable load value is estimated to be one-sixth or one-seventh of the breaking strength of the rope used.

- 2) Sling wire ropes from the middle portion of the hook.

Slinging near the edge of the hook may cause the rope to slip off the hook during hoisting, and a serious accident can result. Hooks have a maximum strength at the middle portion.

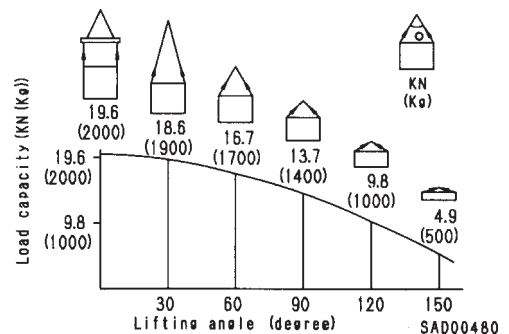


- 3) Do not sling a heavy load with one rope alone, but sling with two or more ropes symmetrically wound onto the load.

⚠ Slinging with one rope may cause turning of the load during hoisting, untwisting of the rope, or slipping of the rope from its original winding position on the load, which can result in a dangerous accident.

- 4) Do not sling a heavy load with ropes forming a wide hanging angle from the hook. When hoisting a load with two or more ropes, the force subjected to each rope will increase with the hanging angles. The table below shows the variation of allowable load (kg) when hoisting is made with two ropes, each of which is allowed to sling up to 1000 kg vertically, at various hanging angles.

When two ropes sling a load vertically, up to 2000 kg of total weight can be suspended. This weight becomes 1000 kg when two ropes make a 120° hanging angle. On the other hand, two ropes are subjected to an excessive force as large as 4000 kg if they sling a 2000 kg load at a lifting angle of 150°.



COATING MATERIALS

The recommended coating materials prescribed in Komatsu Shop Manuals are listed below.



Category	Komatsu code	Part No.	Q'ty	Container	Main applications, features
Adhesive	LT-1A	790-129-9030	150 g	Tube	<ul style="list-style-type: none"> Used to prevent rubber gaskets, rubber cushions, and cork plugs from coming out
	LT-1B	790-129-9050	20 g (x2)	Plastic container	<ul style="list-style-type: none"> Used in places requiring an immediately effective, strong adhesive. Used for plastics (except polyethylene, polypropylene, tetrafluoroethylene and vinyl chloride), rubber, metal, and non-metal.
	LT-2	09940-00030	50 g	Plastic container	<ul style="list-style-type: none"> Features: resistance to heat, chemicals Used for anti-loosening and sealant purposes for bolts and plugs
	LT-3	790-129-9060 (Set of adhesive and hardening agent)	Adhesive : 1 kg Hardening agent : 500 g	Can	<ul style="list-style-type: none"> Used as adhesive or sealant for metal, glass, plastic
	LT-4		250 g	Plastic container	<ul style="list-style-type: none"> Used as sealant for machined holes
	(Loctite 648-50)	790-129-9040	50 cc	-	<ul style="list-style-type: none"> Features: Resistance to heat, chemicals Used at joint portions subject to high temperature
Gasket sealant	LG-1	79A-129-9110	200 g	Tube	<ul style="list-style-type: none"> Used as adhesive or sealant for gaskets and packings of power train case, etc.
	LG-3	790-129-9070	1kg	Can	<ul style="list-style-type: none"> Features: Resistance to heat Used as sealant for flange surfaces and bolts at high temperature locations, used to prevent seizure Used as sealant for heat resistant gasket for high temperature locations such as engine precombustion chamber, exhaust pipe
	LG-4	790-120-9020	200 g	Tube	<ul style="list-style-type: none"> Features: Resistance to water, oil Used as sealant for flange surface, thread Also possible to use as sealant for flanges with large clearance Used as sealant for mating surfaces of final drive case, transmission case.
	LG-5	790-129-9080	1 kg	Plastic container	<ul style="list-style-type: none"> Used as sealant for various threads, pipe joints, flanges Used as sealant for tapered plugs, elbows, nipples of hydraulic piping
	LG-6	09940-00011	250 g	Tube	<ul style="list-style-type: none"> Features: Silicon based, resistance to heat, cold Used as sealant for flange surface, thread Used as sealant for oil pan, final drive case, etc.
	LG-7	09920-00150	150 g	Tube	<ul style="list-style-type: none"> Features: Silicon based, quick hardening type Used as sealant for flywheel housing, intake manifold, oil pan, thermostat housing, etc.
Rust prevention lubricant	-	09940-00051	60 g	Can	<ul style="list-style-type: none"> Used as lubricant for sliding parts (to prevent squeaking)
Molybdenum disulphide lubricant	-	09940-00040	200 g	Tube	<ul style="list-style-type: none"> Used to prevent seizure or scuffing of the thread when press fitting or shrink fitting Used as lubricant for linkage, bearings, etc.
Lithium grease	G2-LI	SYG350LI SYG-400LI SYG-400LI-A SYG-160LI SYGA-160CNLI	Various	Various	<ul style="list-style-type: none"> General purpose type
Calcium grease	G2-CA	SSG2-400CA SYG2-350CA SYG2-400CA-A SYG2-160CA SYGA-16NCA	Various	Various	<ul style="list-style-type: none"> Used for normal temperature, light load bearing at places in contact with water or steam
Molybdenum disulphide grease	-	SYG2-400M	400 g (10 per case)	Bellows type	<ul style="list-style-type: none"> Used for places with heavy load

STANDARD TIGHTENING TORQUE

STANDARD TIGHTENING TORQUES OF BOLTS AND NUTS

The following charts give the standard tightening torques of bolts and nuts. Exceptions are given in section of **DISASSEMBLY AND ASSEMBLY**.

1 Kgm = 9.806 Nm

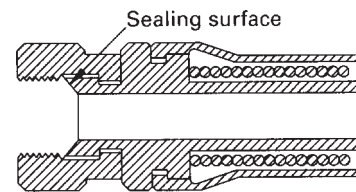
Thread diameter of bolt	Width across flats		
		SAD00481	SAD00482
mm	mm	kgm	Nm
6	10	1.35 ± 0.15	13.2 ± 1.4
8	13	3.2 ± 0.3	31.4 ± 2.9
10	17	6.7 ± 0.7	65.7 ± 6.8
12	19	11.5 ± 1.0	112 ± 9.8
14	22	18.0 ± 2.0	177 ± 19
16	24	28.5 ± 3	279 ± 29
18	27	39 ± 4	383 ± 39
20	30	56 ± 6	549 ± 58
22	32	76 ± 8	745 ± 78
24	36	94.5 ± 10	927 ± 98
27	41	135 ± 15	1320 ± 140
30	46	175 ± 20	1720 ± 190
33	50	225 ± 25	2210 ± 240
36	55	280 ± 30	2750 ± 290
39	60	335 ± 25	3280 ± 340

- ★ This torque table does not apply to the bolts with nylon packaging or other nonferrous metal washers are to be used, or which require tightening to otherwise specified torque.

TIGHTENING TORQUE OF SPLIT FLANGE BOLTS

Use these torques for split flange bolts.

Thread diameter of bolt	Width across flats	Tightening torque	
		kgm	Nm
10	14	6.7 ± 0.7	65.7 ± 6.8
12	17	11.5 ± 1	112 ± 9.8
16	22	28.5 ± 3	279 ± 29

**TIGHTENING TORQUE FOR FLARED NUTS**

Use these torques for flared part of nut.

SAD00483

Thread diameter of bolt	Width across flats	Tightening torque	
		kgm	Nm
14	19	2.5 ± 0.5	24.5 ± 4.9
18	24	5 ± 2	49 ± 19.6
22	27	8 ± 2	78.5 ± 19.6
24	32	14 ± 3	137.3 ± 29.4
30	36	18 ± 3	176.5 ± 29.4
33	41	20 ± 5	196.1 ± 49
36	46	25 ± 5	245.2 ± 49
42	55	30 ± 5	294.2 ± 49

ELECTRIC WIRE CODE

In the wiring diagrams, various colors and symbols are employed to indicate the thickness of wires. This wire code table will help you understand WIRING DIAGRAMS.

Example: 5WB indicates a cable having a nominales number 5 and white coating with black stripe.

CLASSIFICATION BY THICKNESS

Nominal number	Copper wire			Cable O.D. (mm)	Current rating (A)	Applicable circuit
	Number of strands	Dia. of strands (mm)	Cross section (mm ²)			
0.85	11	0.32	0.88	2.4	12	Starting, lighting, signal etc.
2	26	0.32	2.09	3.1	20	Lighting, signal etc.
5	65	0.32	5.23	4.6	37	harging and signal
15	84	0.45	13.36	7.0	59	Starting (Glow plug)
40	85	0.80	42.73	11.4	135	Starting
60	127	0.80	63.84	13.6	178	Starting
100	217	0.80	109.1	17.6	230	Starting

CLASSIFICATION BY COLOR AND CODE

Priority	Circuits Classification	Charging	Ground	Starting	Lighting	Instrument	Signal	Other
		1	Pri- mary	Code W	B	B	R	Y
		Color White	Black	Black	Red	Yellow	Green	Blue
2	Aux- iliary	Code WR	-	BW	RW	YR	GW	LW
		Color White & Red	-	Black & White	Red & White	Yellow & Red	Green & White	Blue & White
3		Code WB	-	BY	RB	YB	GR	LR
		Color White & Black	-	Black & Yellow	Red & Black	Yellow & Black	Green & Red	Blue & Red
4		Code WL	-	BR	RY	YG	GY	LY
		Color White & Blue	-	Black & Red	Red & Yellow	Yellow & Green	Green & Yellow	Blue & Yellow
5		Code WG	-	-	RG	YL	GB	LBB
		Color White & Green	-	-	Red & Green	Yellow & Blue	Green & Black	Blue & Black
6		Code -	-	-	RL	YW	GL	-
		Color -	-	-	Red & Blue	Yellow & White	Green & Blue	-

CONVERSION TABLE

METHOD OF USING THE CONVERSION TABLE

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

EXAMPLE

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

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

Ⓑ

Millimeters to inches 1 mm = 0.03937 in

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

Ⓒ

Millimeters to Inches

1 mm = 0.03937 in

	0	1	2	3	4	5	6	7	8	9
0	0	0.039	0.079	0.118	0.157	0.197	0.236	0.276	0.315	0.354
10	0.394	0.433	0.472	0.512	0.551	0.591	0.630	0.669	0.709	0.748
20	0.787	0.827	0.866	0.906	0.945	0.984	1.024	1.063	1.102	1.142
30	1.181	1.220	1.260	1.299	1.339	1.378	1.417	1.457	1.496	1.536
40	1.575	1.614	1.654	1.693	1.732	1.772	1.811	1.850	1.890	1.929
50	1.969	2.008	2.047	2.087	2.126	2.165	2.205	2.244	2.283	2.323
60	2.362	2.402	2.441	2.480	2.520	2.559	2.598	2.638	2.677	2.712
70	2.756	2.795	2.835	2.874	2.913	2.953	2.992	3.032	3.071	3.110
80	3.150	3.189	3.228	3.268	33.07	3.346	3.386	3.425	3.465	3.504
90	3.543	3.583	3.622	3.661	3.701	3.740	3.780	3.819	3.858	3.898

Kilogram to Pound

1kg = 2.2046 lb

	0	1	2	3	4	5	6	7	8	9
0	0	2.20	4.41	6.61	8.82	11.02	13.23	15.43	17.64	19.84
10	22.05	24.25	26.46	28.66	30.86	33.07	35.27	37.48	39.68	41.89
20	44.09	46.30	48.50	50.71	51.91	55.12	57.32	59.53	61.73	63.93
30	66.14	68.34	70.55	72.75	74.96	77.16	79.37	81.57	83.78	85.98
40	88.18	90.39	92.59	94.80	97.00	99.21	101.41	103.62	105.82	108.03
50	110.23	112.44	114.64	116.85	119.05	121.25	123.46	135.66	127.87	130.07
60	132.28	134.48	136.69	138.89	141.10	143.30	145.51	147.71	149.91	152.12
70	154.32	156.53	158.73	160.94	163.14	165.35	167.55	169.76	171.96	174.17
80	176.37	178.57	180.78	182.98	185.19	187.39	189.60	191.80	194.01	196.21
90	198.42	200.62	202.03	205.03	207.24	209.44	211.64	213.85	216.05	218.26

Litre to U.S. Gallon

1ℓ = 0.2642 U.S. Gal

	0	1	2	3	4	5	6	7	8	9
0	0	0.264	0.528	0.793	1.057	1.321	1.585	1.849	2.113	2.378
10	2.642	2.906	3.170	3.434	3.698	3.963	4.227	4.491	4.755	5.019
20	5.283	5.548	5.812	6.076	6.3340	6.604	6.869	7.133	7.397	7.661
30	7.925	8.189	8.454	8.718	8.982	9.246	9.510	9.774	10.039	10.303
40	10.567	10.831	11.095	11.359	11.624	11.888	12.152	12.416	12.680	12.944
50	13.209	13.473	13.737	14.001	14.265	14.529	14.795	15.058	15.322	15.586
60	15.850	16.115	16.379	16.643	16.907	17.171	17.435	17.700	17.964	18.228
70	18.492	18.756	19.020	19.285	19.549	19.813	20.077	20.341	20.605	20.870
80	21.134	21.398	21.662	21.926	22.190	22.455	22.719	22.983	23.247	23.511
90	23.775	24.040	24.304	24.568	24.832	25.096	25.361	25.625	25.889	26.153

Litre to U.K. Gallon

1ℓ = 0.21997 U.K. Gal

	0	1	2	3	4	5	6	7	8	9
0	0	0.220	0.440	0.660	0.880	1.100	1.320	1.540	1.760	1.980
10	2.200	2.420	2.640	2.860	3.080	3.300	35.20	3.740	3.950	4.179
20	4.399	4.619	4.839	5.059	5.279	5.499	5.719	5.939	6.159	6379
30	6.599	6.819	7.039	7.259	7.479	7.969	7.919	8.139	8.359	8.579
40	8.799	9.019	9.239	9.459	9.679	9.899	10.119	10.339	10.559	10.778
50	10.998	11.281	11.438	11.658	11.878	12.098	12.318	12.528	12.758	12.978
60	13.198	13.418	13.638	13.858	14.078	14.298	14.518	14.738	14.958	15.178
70	15.398	15.618	15.838	16.058	16.278	16.498	16.718	16.938	17.158	17.378
80	17.598	17.818	18.037	18.257	18.477	18.697	18.917	19.137	19.357	19.577
90	19.797	20.017	20.237	20.457	20.677	20.897	21.117	21.337	21.557	21.777

kgm to ft. lb

1 kgm = 7.233 ft. lb

	0	1	2	3	4	5	6	7	8	9
0	0	7.2	14.5	21.7	28.9	36.2	43.4	50.6	57.9	65.1
10	72.3	79.6	86.8	94.0	101.3	108.5	115.7	123.0	130.2	137.4
20	144.7	151.9	159.1	166.4	173.6	180.8	188.1	195.3	202.5	209.8
30	217.0	224.2	231.5	238.7	245.9	253.2	260.4	267.6	274.9	282.1
40	289.3	296.6	303.8	311.0	318.3	325.5	332.7	340.0	347.2	354.4
50	361.7	368.9	376.1	383.4	390.6	397.8	405.1	412.3	419.5	426.8
60	434.0	441.2	448.5	455.7	462.9	470.2	477.4	484.6	491.8	499.1
70	506.3	513.5	520.8	528.0	535.2	542.5	549.7	556.9	564.2	571.4
80	578.6	585.9	593.1	600.3	607.6	614.8	622.0	629.3	636.5	643.7
90	651.0	658.2	665.4	672.7	679.9	687.1	694.4	701.6	708.8	716.1
100	723.3	730.5	737.8	745.0	752.2	759.5	766.7	773.9	781.2	788.4
110	795.6	802.9	810.1	817.3	824.6	831.8	839.0	846.3	853.5	860.7
120	868.0	875.2	882.4	889.7	896.9	904.1	911.4	918.6	925.8	933.1
130	940.3	947.5	954.8	962.0	969.2	976.5	983.7	990.9	998.2	1005.4
140	1012.6	1019.9	1027.1	1034.3	1041.5	1048.8	1056.0	1063.2	1070.5	1077.7
150	1084.9	1092.2	1099.4	1106.6	1113.9	1121.1	1128.3	1135.6	1142.8	1150.0
160	1157.3	1164.5	1171.7	1179.0	1186.2	1193.4	1200.7	1207.9	1215.1	1222.4
170	1129.6	1236.8	1244.1	1251.3	1258.5	1265.8	1273.0	1280.1	1287.5	1294.7
180	1301.9	1309.2	1316.4	1323.6	1330.9	1338.1	1245.3	1352.6	1359.8	1367.0
190	1374.3	1381.5	1388.7	1396.0	1403.2	1410.4	1417.7	1424.9	1432.1	1439.4

kg/cm² to lb/in²1 kg/cm² = 14.2233 lb/in²

	0	1	2	3	4	5	6	7	8	9
0	0	14.2	28.4	42.7	56.9	71.1	85.3	99.6	113.8	128.0
10	142.2	156.5	170.7	184.9	199.1	213.4	227.6	241.8	256.0	270.2
20	284.5	298.7	312.9	327.1	341.4	355.6	369.8	384.0	398.3	412.5
30	426.7	440.9	455.1	469.4	483.6	497.8	512.0	526.3	540.5	554.7
40	568.9	583.2	597.4	611.6	625.8	640.1	654.3	668.5	682.7	696.9
50	711.2	725.4	739.6	753.8	768.1	782.3	796.5	810.7	825.0	839.2
60	853.4	867.6	881.8	896.1	910.3	924.5	938.7	953.0	967.2	981.4
70	995.6	1010	1024	1038	1053	1067	1081	1095	1109	1124
80	1138	1152	1166	1181	1195	1209	1223	1237	1252	1266
90	1280	1294	1309	1323	1337	1351	1365	1380	1394	1408
100	1422	1437	1451	1465	1479	1493	1508	1522	1536	1550
110	1565	1579	1593	1607	1621	1636	1650	1664	1678	1693
120	1707	1721	1735	1749	1764	1778	1792	1806	1821	1835
130	1849	1863	1877	1892	1906	1920	1934	1949	1963	1977
140	1991	2005	2020	2034	2048	2062	2077	2091	2105	2119
150	2134	2148	2162	2176	2190	2205	2219	2233	2247	2262
160	2276	2290	2304	2318	2333	2347	2361	2375	2389	2404
170	2418	2432	2446	2460	2475	2489	2503	2518	2532	2546
180	2560	2574	2589	2603	1617	2631	2646	2660	2674	2688
190	2702	2717	2731	2745	2759	2773	2788	2802	2816	2830
200	2845	2859	2873	2887	2901	2916	2930	2944	2958	2973
210	2987	3001	3015	3030	3044	3058	3072	3086	3101	3115
220	3129	3143	3158	3172	3186	3200	3214	3229	3243	3257
230	3271	3286	3300	3314	3328	3343	3357	4471	3385	3399
240	3414	3428	3442	3456	3470	3485	3499	3513	3527	3542

Temperature

Fahrenheit-Centigrade Conversion; a simple way to convert a Fahrenheit temperature reading into a Centigrade temperature reading or vice is to enter the accompanying table in the center or boldface column of figures.

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

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

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

$$1^{\circ}\text{C} = 33.8^{\circ}\text{F}$$

°C		°F	°C		°F	°C		°F	°C		°F
-40.4	-40	-40.0	-11.7	11	51.8	7.8	46	114.8	27.2	81	117.8
-37.2	-35	-31.0	-11.1	12	53.6	8.3	47	116.6	27.8	82	119.6
-34.4	-30	-22.0	-10.6	13	55.4	8.9	48	118.4	28.3	83	181.4
-31.7	-25	-13.0	-10.0	14	57.2	9.4	49	120.2	28.9	84	183.2
-28.9	-20	-4.0	-9.4	15	59.0	10.0	50	122.0	29.4	85	185.0
-28.3	-19	-2.2	-8.9	16	60.8	10.6	51	123.8	30.0	86	186.8
-27.8	-18	-0.4	-8.3	17	62.6	11.1	52	125.6	30.6	87	188.6
-27.2	-17	1.4	-7.8	18	64.4	11.7	53	127.4	31.1	88	190.4
-26.7	-16	3.2	-7.2	19	66.2	12.2	54	129.2	31.7	89	192.2
-26.1	-15	5.0	-6.7	20	68.0	12.8	55	131.0	32.2	90	194.0
-25.6	-14	6.8	-6.1	21	69.8	13.3	56	132.8	32.8	91	195.8
-25.0	-13	8.6	-5.6	22	71.6	13.9	57	134.6	33.3	92	197.6
-24.4	-12	10.4	-5.0	23	73.4	14.4	58	136.4	33.9	03	199.4
-23.9	-11	12.2	-4.4	24	73.4	15.0	59	138.2	34.4	94	201.2
-23.3	-10	14.0	-3.9	25	75.2	15.6	60	140.0	35.0	95	203.0
-22.8	-9	15.8	-3.3	26	77.0	16.1	61	141.8	35.6	96	204.8
-22.2	-8	17.6	-2.8	27	78.8	16.7	62	143.6	36.1	97	206.6
-21.7	-7	19.4	-2.2	28	80.6	17.2	63	145.4	36.7	98	208.4
-21.1	-6	21.2	-1.7	29	82.4	17.8	64	147.2	37.2	99	210.2
-20.6	-5	23.0	-1.1	30	86.0	18.3	65	149.0	37.8	100	212.0
-20.0	-4	24.8	-0.6	31	87.8	18.9	66	150.8	40.6	105	221.0
-19.4	-3	26.6	0	32	89.6	19.4	67	152.6	43.3	110	230.0
-18.9	-2	28.4	0.6	33	91.4	20.0	68	154.4	46.1	115	239.0
-18.3	-1	30.2	1.1	34	93.2	20.6	69	156.2	48.9	120	248.0
-17.8	0	32.0	1.7	35	95.0	21.1	70	158.0	51.7	125	257.0
-17.2	1	33.8	2.2	36	96.8	21.7	71	159.8	54.4	130	266.0
-16.7	2	35.6	2.8	37	98.6	22.2	72	161.6	57.2	135	275.0
-16.1	3	37.4	3.3	38	100.4	22.8	73	163.4	60.0	140	284.0
-15.6	4	39.2	3.9	39	102.2	23.3	74	165.2	62.7	145	293.0
-15.0	5	41.0	4.4	40	104.0	23.9	75	167.0	65.6	150	302.0
-14.4	6	42.8	5.0	41	105.8	24.4	76	168.8	68.3	155	311.0
-13.9	7	44.6	5.6	42	107.6	25.0	77	170.6	71.1	160	320.0
-13.3	8	46.4	6.1	43	109.4	25.6	78	172.4	73.9	165	329.0
-12.8	9	48.2	6.7	44	111.2	26.1	79	174.2	76.7	170	338.0
-12.2	10	50.0	7.2	45	113.0	26.7	80	176.0	79.4	175	347.0

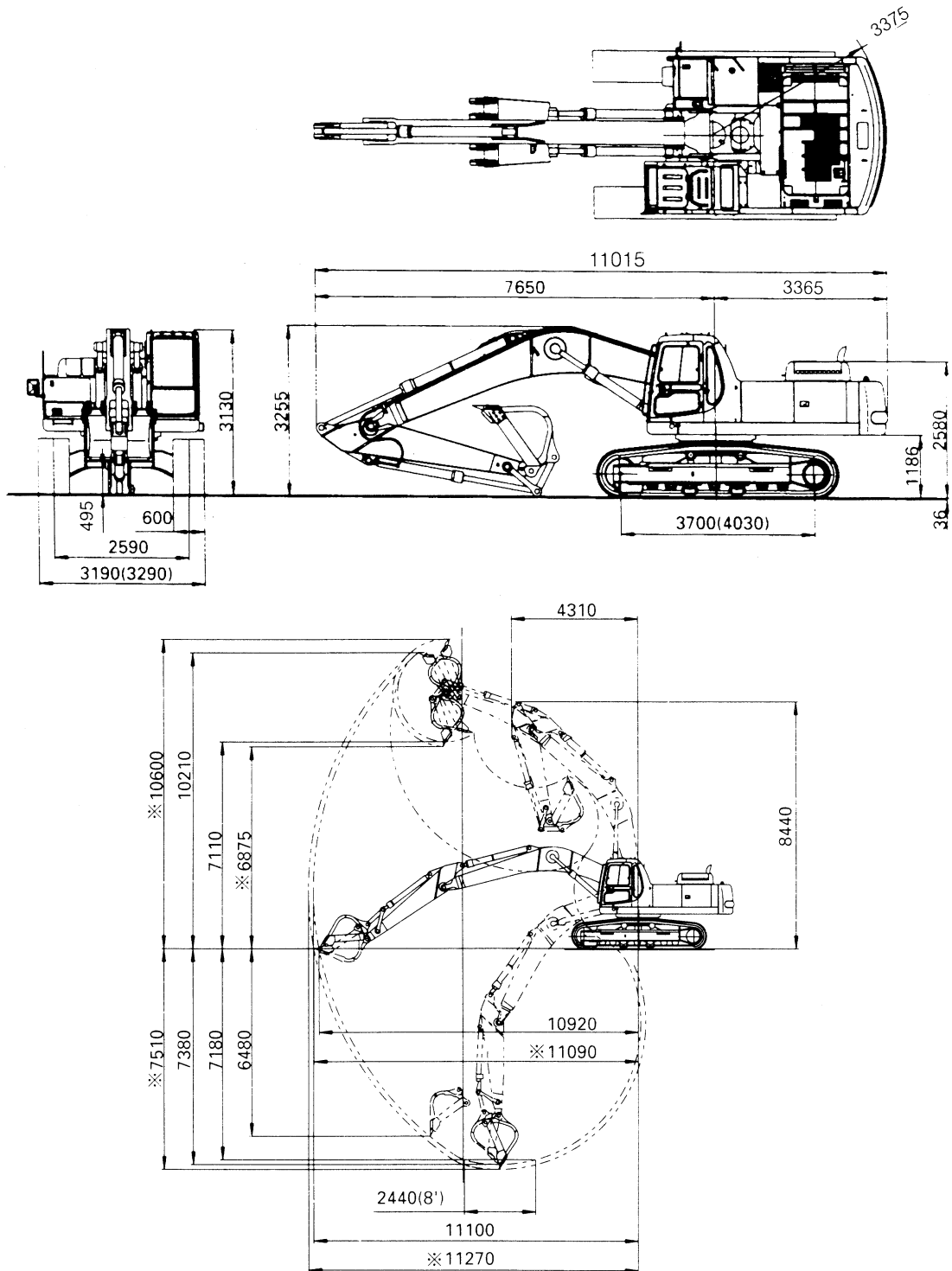
01 GENERAL

Specification drawings	01- 2
Specifications	01- 4
Weight table	01- 8
Fuel, coolant and lubricants	01-12

SPECIFICATION DRAWINGS

PC340, 340LC-6K

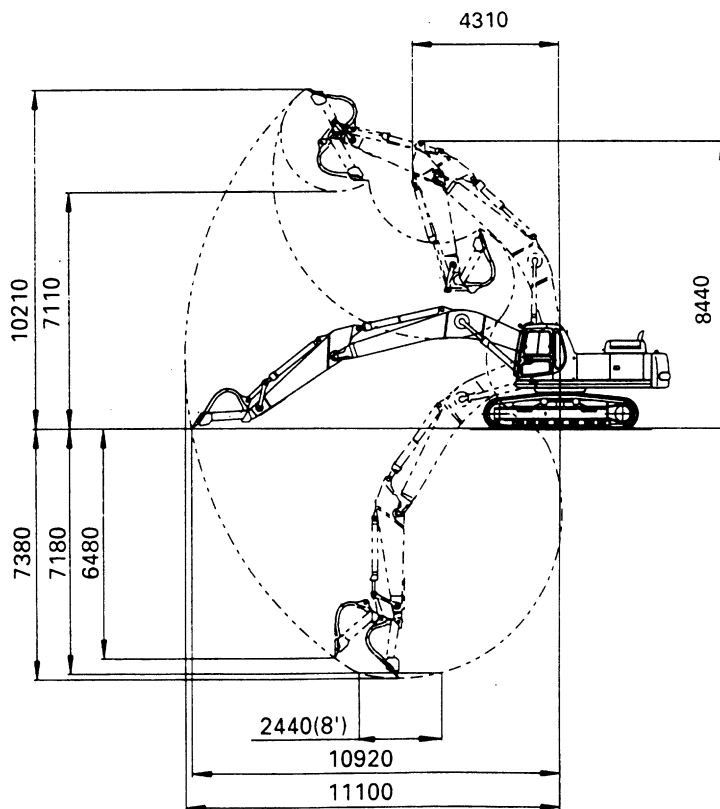
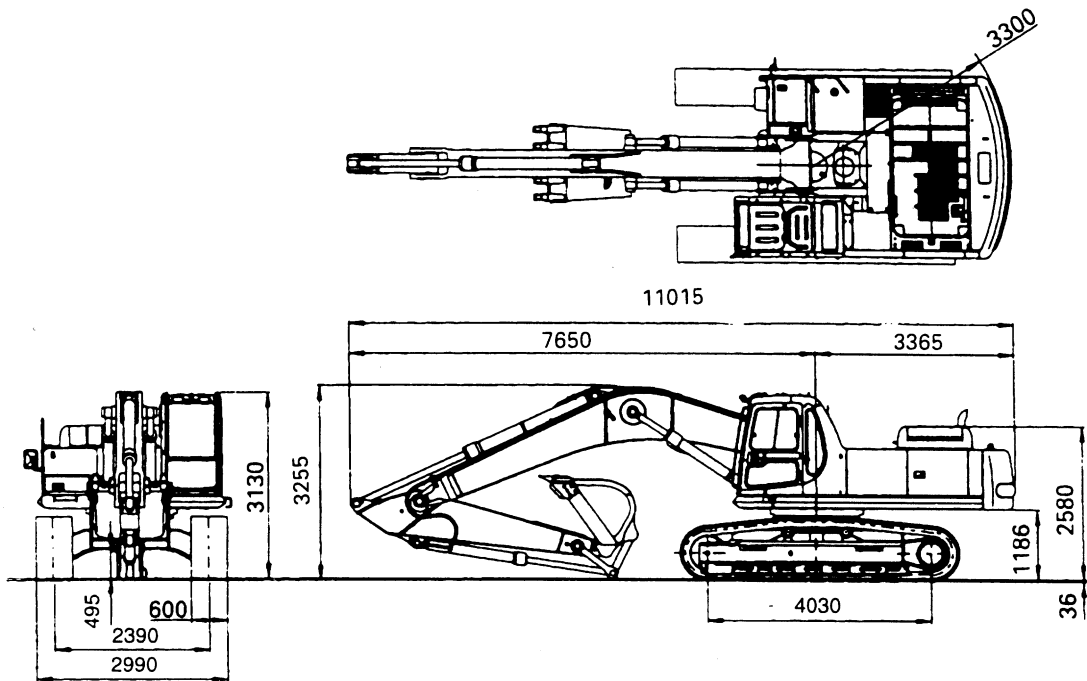
Unit: mm



- ★ The figures in () indicate the PC340LC.
- ★ The values marked ※ are for shovel operations.

PC340NLC-6K

Unit: mm



SPECIFICATIONS

Machine model			PC340LC-6K	PC340NLC-6K		
Serial number			K32001 and up	K32001 and up		
Bucket capacity		SAE/CECE m ³	1.32/1.2	1.32/1.2		
Operating weight		kg	33530	33130		
Performance	Working ranges	Max. digging depth	mm	7,380	7,380	
		Max. vertical wall depth	mm	6,480	6,480	
		Max. digging reach	mm	11,100	11,100	
		Max. reach at ground level	mm	10,920	10,920	
		Max. digging height	mm	10,210	10,210	
		Max. dumping height	mm	7,110	7,110	
		Max. digging force (using power max. function)	kN{kg}	187.2 (19,100)	187.2 (19,100)	
		Swing speed	rpm	10.0	10.0	
		Swing max. slope angle	deg.	21.0	21.0	
		Travel speed	km/h	Lo: 3.2 Mi: 4.5 Hi: 5.5	Lo: 3.2 Mi: 4.5 Hi: 5.5	
		Gradeability	deg.	35	35	
		Ground pressure [standard triple grouser shoe width]	kg/cm ²	0.051 (0.52) [700 mm]	0.062 (0.3) [700 mm]	
	Dimensions	Overall length (for transport)	mm	11015	11015	
		Overall width	mm	3,290	2,995	
Overall width of track		mm	3,290	2,990		
Overall height (for transport)		mm	3,255	3,265		
Overall height to top of cab		mm	3,130	3,130		
Ground clearance of counterweight		mm	1,186	1,186		
Min. ground clearance		mm	495	495		
Tail swing radius		mm	3375	3375		
Min. swing radius of work equipment		mm	4,310	4,310		
Height of work equipment at min. swing radius		mm	8,440	8,440		
Length of track on ground		mm	4,030	4,030		
Track gauge		mm	2,590	2,390		
Height of machine cab	mm	2,580	2,580			

Machine model		PC340LC,NLC-6K				
Serial number		K32001 and up				
Engine	Model	SAA6D108E-2				
	Type	4-cycle, water-cooled, in-line, vertical, direct injection, with turbocharger and aftercooler (air cooled)				
	No. of cylinders – bore x stroke	mm	6 – 108 x 130			
	Piston displacement	ℓ {cc}	7.145 {7,145}			
	Performance	Flywheel horsepower	kW/rpm{HP/rpm}	172.8/2,050 {231.7/2,050}		
		Max. torque	Nm/rpm{kgm/rpm}	897.2/1,500 {91.5/1,500}		
		Max. speed at no load	rpm	2,300		
		Min. speed at no load	rpm	900		
		Min. fuel consumption	g/kW.h{g/HP.h}	205 {151}		
	Starting motor		24V, 7.5 kW			
Alternator		24V, 33A				
Battery		12V, 160 Ah x 2				
Radiator core type		CWX-4				
Under-carriage	Carrier roller	2 on each side				
	Track roller	7 on each side	8 on each side			
	Track shoe	Assembly-type triple grouser, 45 on each side	Assembly-type triple grouser, 48 on each side			
Hydraulic system	Hydraulic pump	Type x No.	HPV160+160, variable displacement piston type x 2			
		Delivery	ℓ/min.	262 x 2		
		Set pressure	MPa{kg/cm ² }	34.8 {355}		
	Control valve	Type x No.	6-spool + 1-spool type + 1-service valve x 1			
		Control method	Hydraulic			
	Hydraulic motor	Travel motor	HMV160ADT-2, Piston type (with brake valve, shaft brake): x 2			
		Swing motor	KMF160ABE-3, Piston type (with safety valve, shaft brake, reverse prevention valve): x 1			
	Hydraulic cylinder	Type		Boom	Arm	Bucket
				Double-acting piston	Double-acting, piston	Double acting piston
		Inside diameter of cylinder	mm	140	160	140
		Diameter of piston rod	mm	100	110	100
		Stroke	mm	1,480	1,685	1,285
		Max. distance between pins	mm	3,610	4,080	3,275
	Min. distance between pins	mm	2,130	2,395	1,990	
	Hydraulic tank		Box-shaped, sealed			
Hydraulic filter		Tank return side				
Hydraulic cooler		Air cooled				

WEIGHT TABLE

Unit: kg

Machine model	PC340LC-6K	PC340NLC-6K	
Serial number	K32001 and up	K32001 and up	
Engine assembly	1,100	1,100	
• Engine	785	785	
• Damper	14.7	14.7	
• Hydraulic pump	200	200	
Radiator, oil cooler assembly	165	165	
Hydraulic tank, filter assembly (excl. hydraulic oil)	228	228	
Fuel tank (excl. fuel)	218	218	
Revolving frame	2,630	2,630	
Operator's cab	287	287	
Operator's seat	29	29	
Counterweight	6,320	6,320	
Swing machinery	380	380	
Control valve (standard)	236	236	
Swing motor	81	81	
Travel motor	173 x 2	173 x 2	
Center swivel joint	38	38	
Track frame assembly	8,560	8,326	
• Track frame	5,182	5,013	
• Swing circle	487	487	
• Idler	166	166	
• Idler cushion	257 x 2	257 x 2	
• Carrier roller	31 x 4	31 x 4	
• Track roller	52 x 16	52 x 16	
• Final drive (incl. travel motor)	595 x 2	595 x 2	

Unit: kg

Machine model	PC340LC-6K	PC340NLC-6K	
Serial number	K32001 and up	K32001 and up	
Track shoe assembly			
Standard triple grouser shoe (600 mm)	3,840	3,840	
Standard triple grouser shoe (700 mm)	4,220	-	
Wide triple grouser shoe (800 mm)	4,560	-	
Boom assembly	2,478	2,478	
Arm assembly	1,615	1,615	
Bucket assembly	1,014	1,014	
Boom cylinder assembly	296 x 2	296 x 2	
Arm cylinder assembly	425	425	
Bucket cylinder assembly	263	263	
Link assembly	320	320	
Boom pin	76 + 15 x 2 + 56 + 17 + 42	76 + 15 x 2 + 56 + 17 + 42	
Arm pin	13 + 17	13 + 17	
Bucket pin	30 x 2	30 x 2	
Link pin	27 x 2	27 x 2	

FUEL, COOLANT AND LUBRICANTS

RESERVOIR	KIND OF FLUID	AMBIENT TEMPERATURE								CAPACITY (ℓ)	
		-22 -30	-4 -20	14 -10	32 0	50 10	68 20	86 30	104°F 40°C	Specified	Refill
Engine oil pan		SAE 30								28.4 7.5 US GAL 6.3 UK GAL	28.4 7.5 US GAL 6.3 UK GAL
		SAE 10W									
		SAE 10W-30									
		SAE 15W-40									
Swing machinery case	Engine oil									13 3.4 US GAL 2.9 UK GAL	13 3.4 US GAL 2.9 UK GAL
Final drive case (each side)										10 2.6 US GAL 2.2 UK GAL	9.5 2.5 US GAL 2.1 UK GAL
Damper case										0.75 0.20 US GAL 0.17 UK GAL	—
Idler (1 each)		SAE 30								0.22 – 0.24 0.058 - 0.063 US GAL 0.048 - 0.053 UK GAL	0.22 – 0.24 0.058 - 0.063 US GAL 0.048 - 0.053 UK GAL
Track roller (1 each)										0.25 – 0.28 0.066 - 0.074 US GAL 0.055 - 0.061 UK GAL	0.25 – 0.28 0.066 - 0.074 US GAL 0.055 - 0.061 UK GAL
Carrier roller (1 each)										0.45 – 0.50 0.12 - 0.13 US GAL 0.099 - 0.11 UK GAL	0.45 – 0.50 0.12 - 0.13 US GAL 0.099 - 0.11 UK GAL
Hydraulic system			SAE 10W								380 100.4 US GAL 83.6 UK GAL
	SAE 10W-30										
	SAE 15W-40										
	Hydraulic oil	HO46-HM (★)									
Fuel tank	Diesel fuel	ASTM D975 No. 2								540 142.7 US GAL 118.8 UK GAL	—
		ASTM D975A No.1									
Cooling system	Coolant									32 8.5 US GAL 7.09 UK GAL	—

NOTE:

- (1) When fuel sulphur content is less than 0.5%, change oil in the oil pan every periodic maintenance hours described in this manual. Change oil according to the following table if fuel sulphur content is above 0.5%.

Fuel sulphur content	Change interval of oil in engine oil pan
0.5 to 1.0%	1/2 of regular interval
Above 1.0%	1/4 of regular interval

- (2) When starting the engine in an atmospheric temperature of lower than 0°C, be sure to use engine oil of SAE10W, SAE10W-30 and SAE15W-40, even though an atmospheric temperature goes up to 10°C more or less in the day time.
- (3) Use API classification CD as engine oil and if API classification CC, reduce the engine oil change interval to half.
- (4) There is no problem if single grade oil is mixed with multigrade oil (SAE10W-30, 15W-40), but be sure to add single grade oil that matches the temperature in the table on the left.
- (5) We recommend Komatsu genuine oil which has been specifically formulated and approved for use in engine and hydraulic work equipment applications.
- ★ For the HO46-HM, use the oil recommended by Komatsu.

ASTM: American Society of Testing and Material

SAE: Society of Automotive Engineers

API: American Petroleum Institute

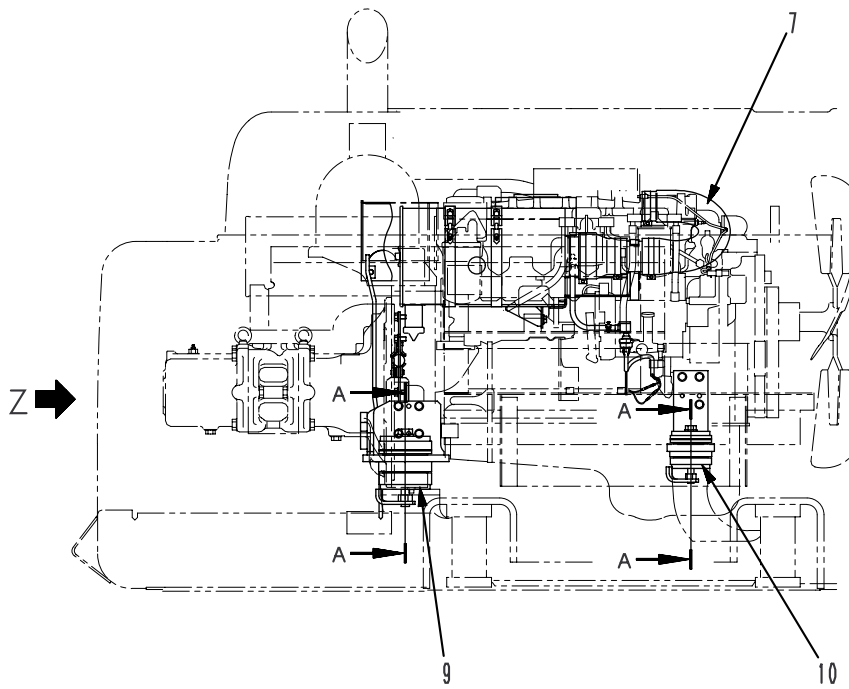
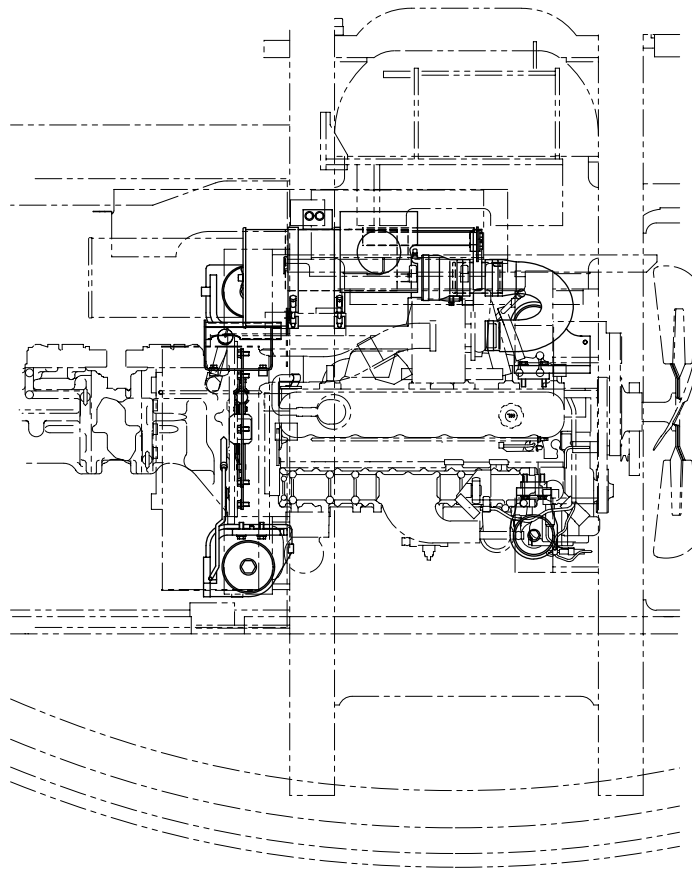
Specified capacity: Total amount of oil including oil for components and oil in piping.

Refill capacity: Amount of oil needed to refill system during normal inspection and maintenance.

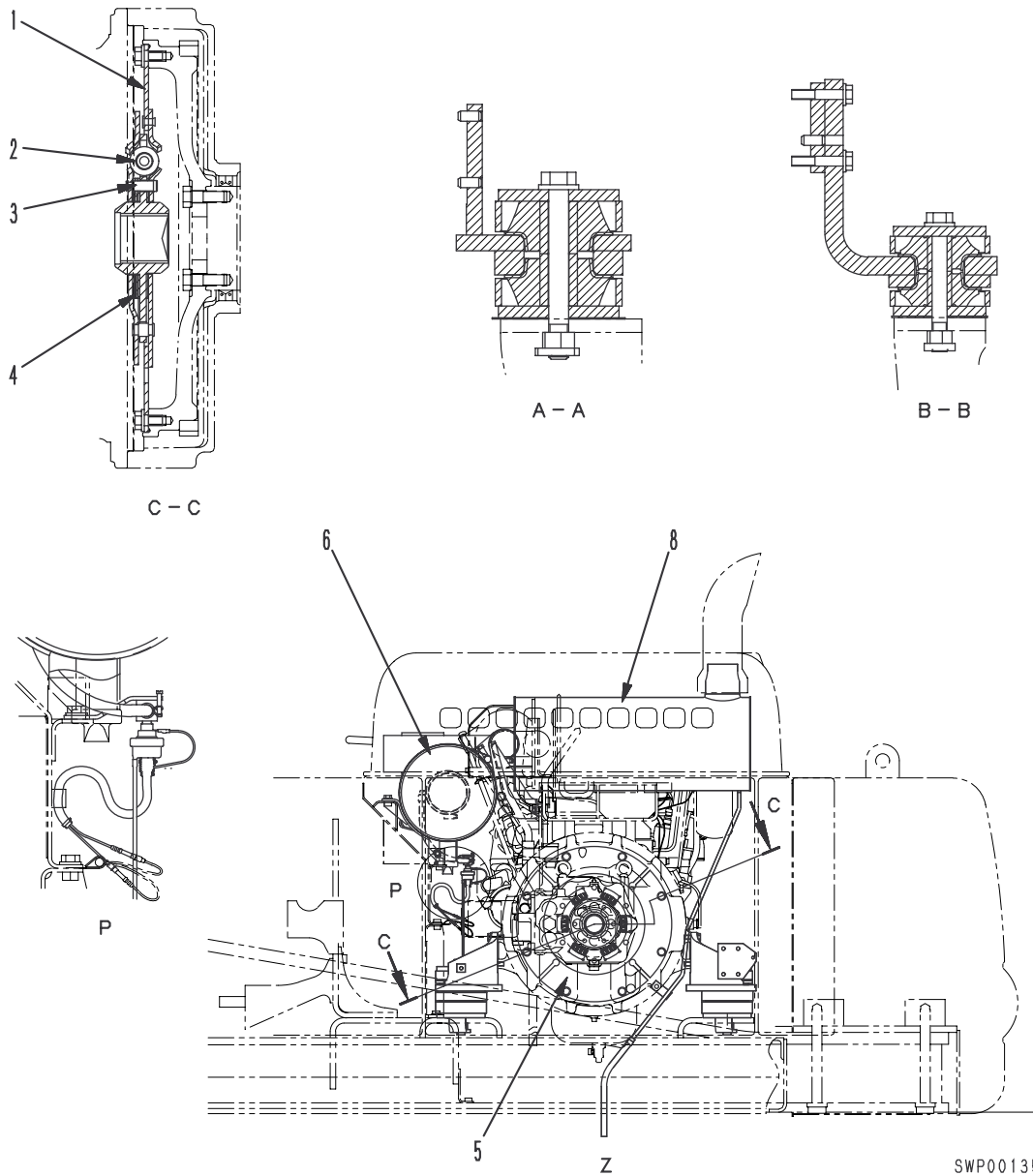
10 STRUCTURE AND FUNCTION

Parts related to engine	10- 2
Radiator, oil cooler	10- 4
Power train	10- 5
Final drive	10- 6
Swing circle	10- 7
Swing machinery	10- 8
Track frame, recoil spring	10- 9
Track shoe	10- 10
Hydraulic piping drawing	10- 12
Hydraulic circuit diagram	10- 14
Hydraulic tank, hydraulic filter	10- 15
Hydraulic pump	10- 17
Control valve	10- 38
Self-reducing pressure valve	10- 48
Suction safety valve	10- 53
CLSS	10- 55
Swing motor	10-120
Center swivel joint	10-126
Travel motor	10-128
Valve control	10-137
Work equipment • swing PPC valve	10-138
Travel PPC valve	10-142
Service PPC valve	10-146
PPC safety lock valve	10-149
PPC accumulator	10-149
PPC shuttle valve, travel junction valve ...	10-151
LS-EPC valve	10-158
Solenoid valve	10-162
Boom safety valve	10-164
Overload warning device	10-167
Work equipment	10-170
Air conditioner	10-171
Actual electric wiring diagram	10-172
Electric circuit diagram	10-176
Engine control	10-180
Electronic control system	10-187
Machine monitor system	10-214
Breaker mode hydraulic performance	10-224

PARTS RELATED TO ENGINE



SWP00134

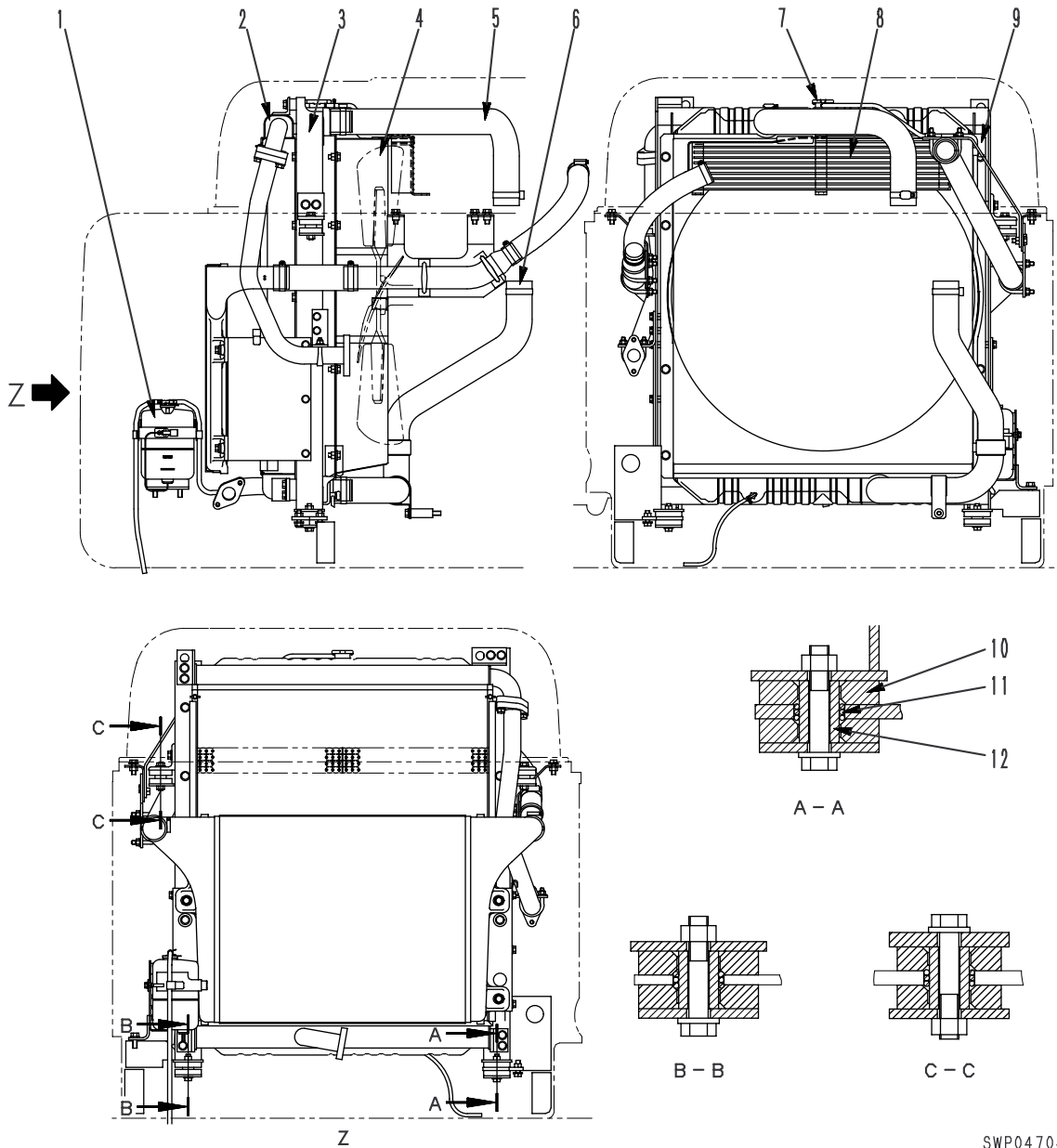


- | | |
|--------------------|------------------------|
| 1. Drive plate | 6. Air cleaner |
| 2. Torsion spring | 7. Intake connector |
| 3. Stopper pin | 8. Muffler |
| 4. Friction plate | 9. Rear engine mount |
| 5. Damper assembly | 10. Front engine mount |

Outline

- The damper assembly is a wet type
Oil capacity: 0.75 ℓ

RADIATOR, OIL COOLER



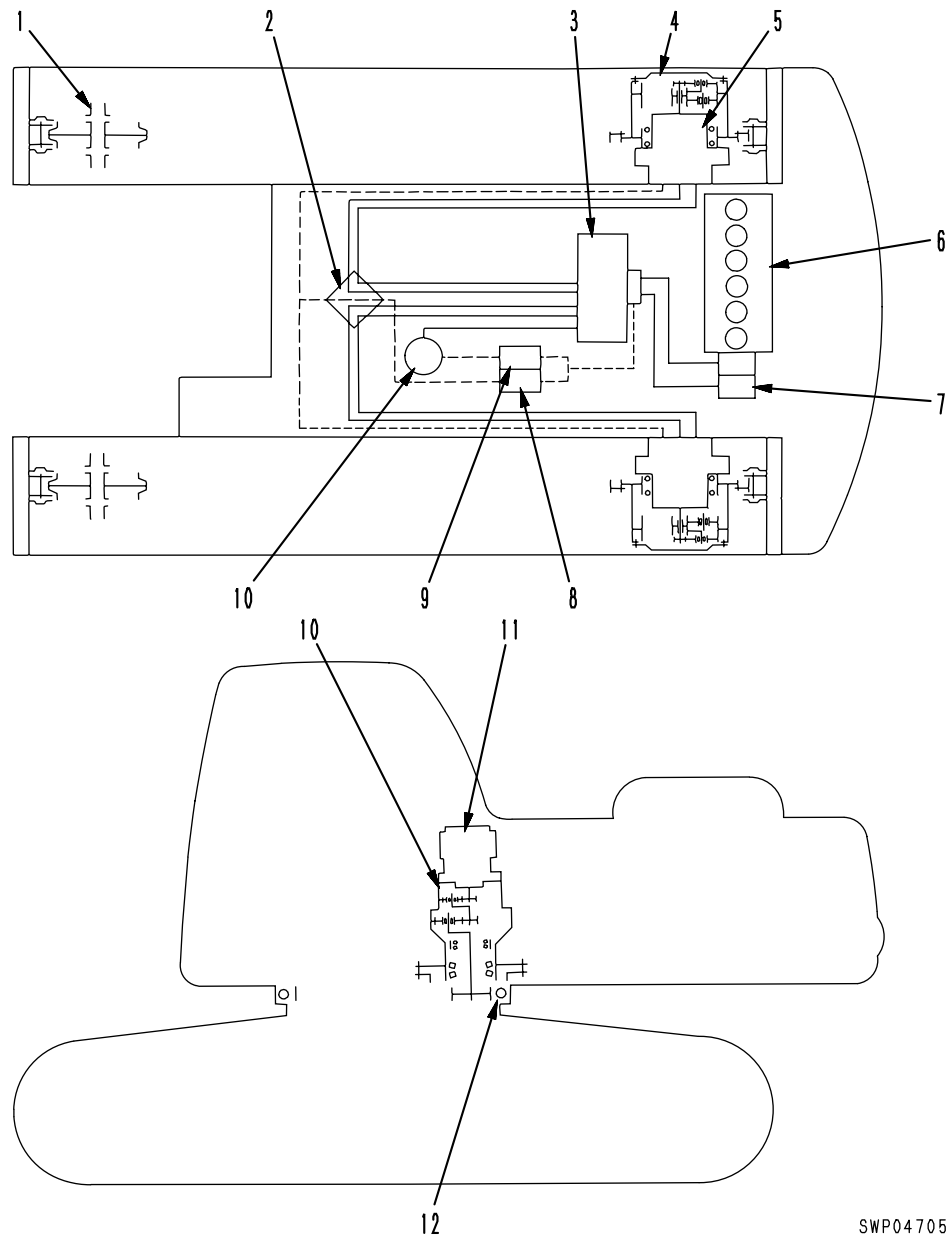
SWP04704

- | | |
|-------------------------|-----------------|
| 1. Reservoir tank | 7. Radiator cap |
| 2. Oil cooler | 8. Net |
| 3. Radiator | 9. Shroud |
| 4. Fan | 10. Cushion |
| 5. Radiator inlet hose | 11. O-ring |
| 6. Radiator outlet hose | 12. Collar |

Specifications

Radiator: CWX-4
 Oil cooler: SF-4

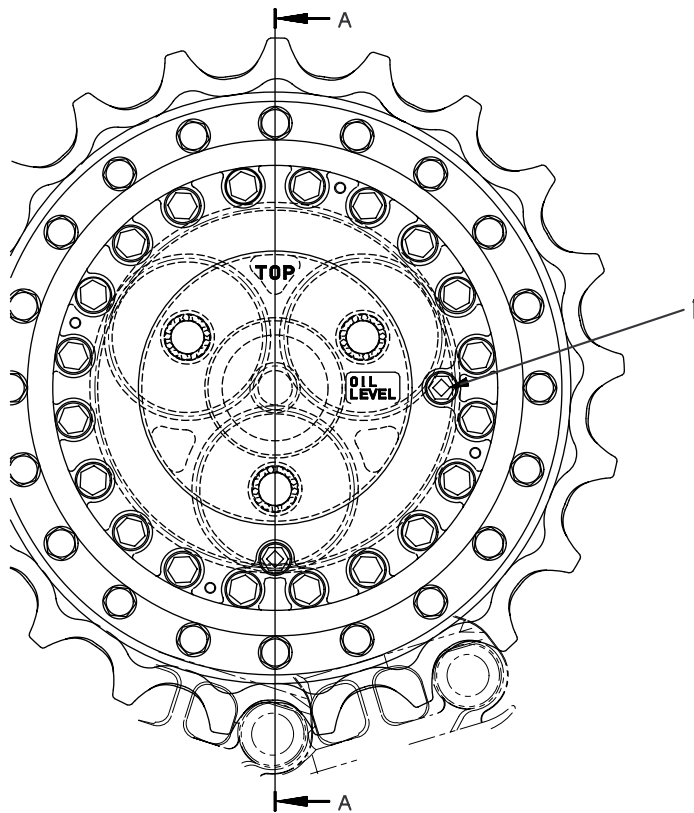
POWER TRAIN



SWP04705

- | | |
|-------------------------------|--------------------------------|
| 1. Idler | 7. Hydraulic pump (HPV160+160) |
| 2. Center swivel joint | 8. Travel speed solenoid valve |
| 3. Control valve | 9. Swing brake solenoid valve |
| 4. Final drive | 10. Swing machinery |
| 5. Travel motor (HMV160ADT-2) | 11. Swing motor (KMF160ABE-3) |
| 6. Engine (SAA6D108-2) | 12. Swing circle |

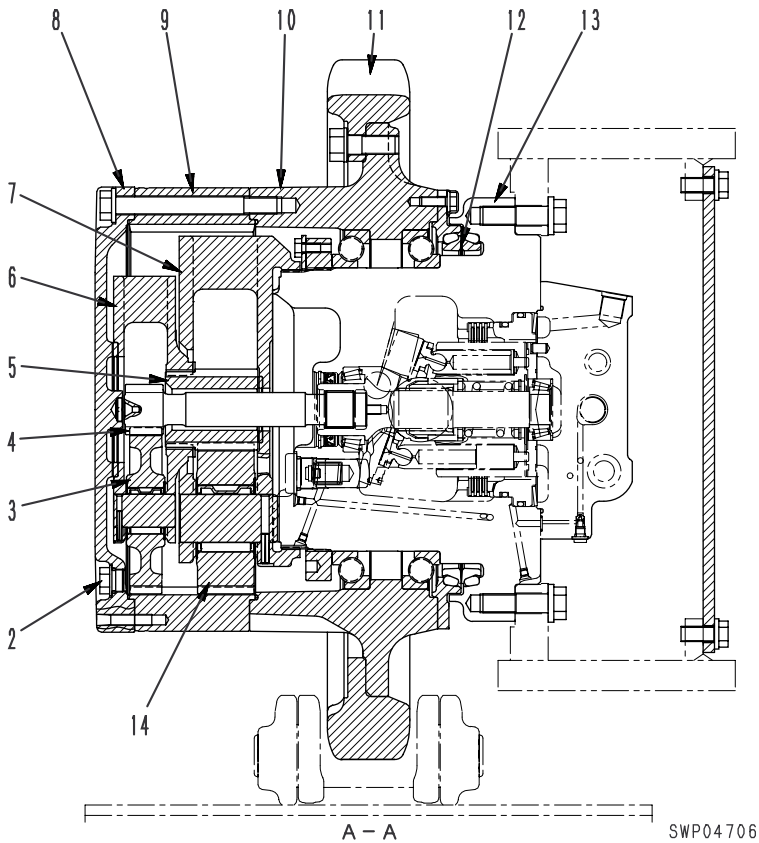
FINAL DRIVE



- 1. Level plug
- 2. Drain plug
- 3. No. 1 planetary gear (No. of teeth: 42)
- 4. No. 1 sun gear (No. of teeth: 11)
- 5. No. 2 sun gear (No. of teeth: 19)
- 6. No. 1 planetary carrier
- 7. No. 2 planetary carrier
- 8. Cover
- 9. Ring gear (No. of teeth: 97)
- 10. Hub
- 11. Sprocket
- 12. Floating seal
- 13. Travel motor
- 14. No. 2 planetary gear (No. of teeth: 38)

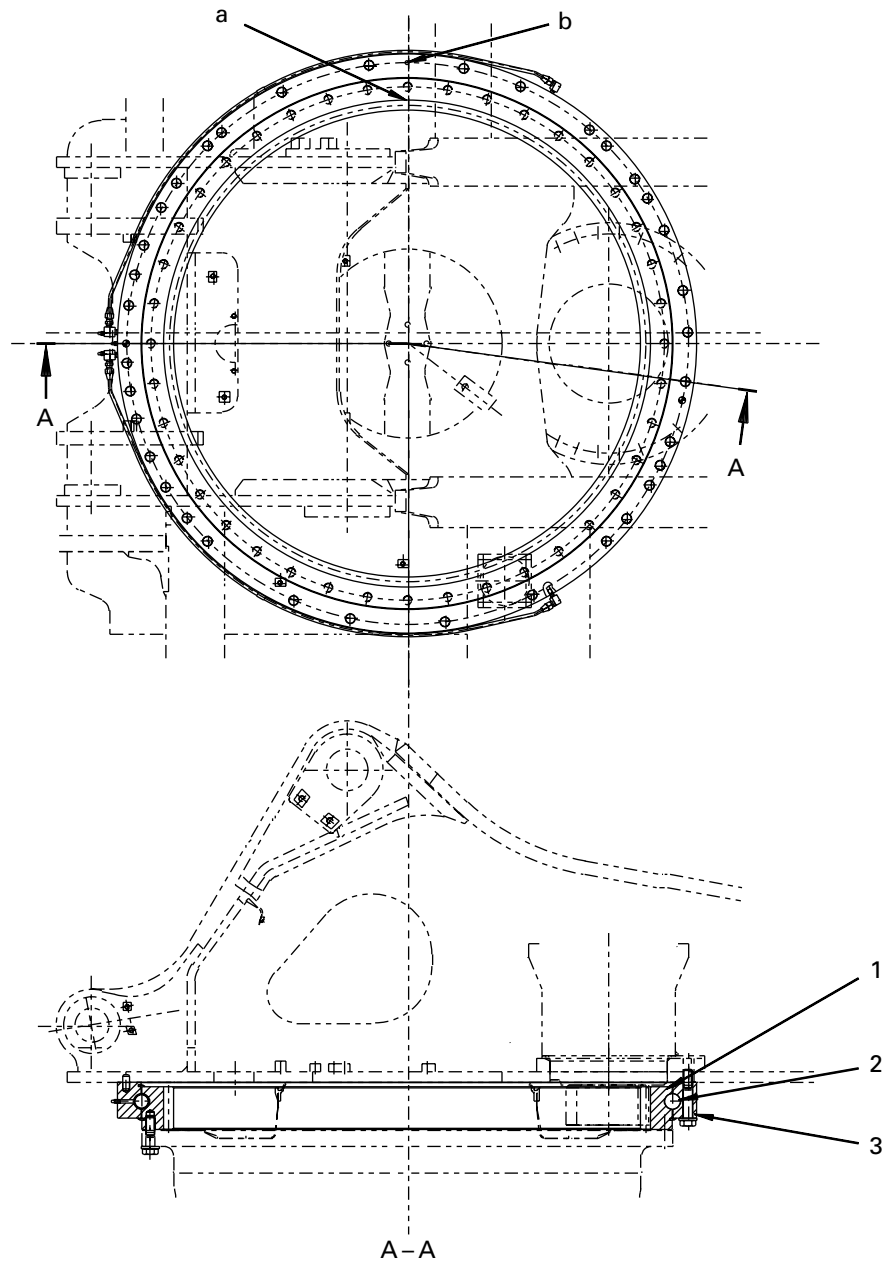
Specifications

Reduction ratio: $-\left(\frac{11+97}{11}\right) \times \left(\frac{19+97}{19}\right) + 1$
 = - 58.943



SWP04706

SWING CIRCLE



SAP00143

1. Swing circle inner race (No. of teeth: 90)
2. Ball
3. Swing circle outer race

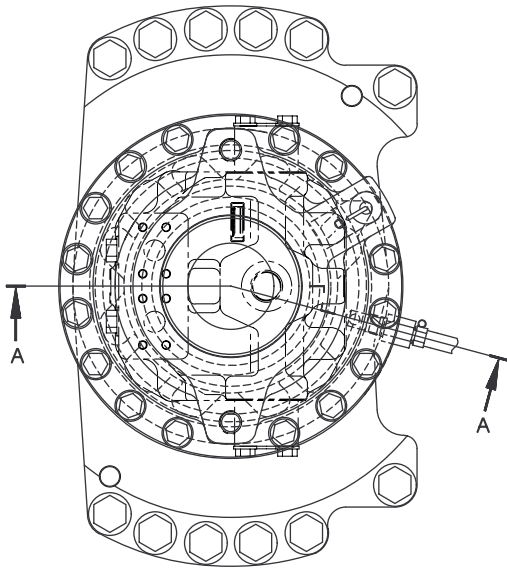
- a. Inner race soft zone S position
- b. Outer race soft zone S position

Specifications

Reduction ratio: $-\frac{90}{13} = -6.923$

Amount of grease: 33 ℓ (G2-LI)

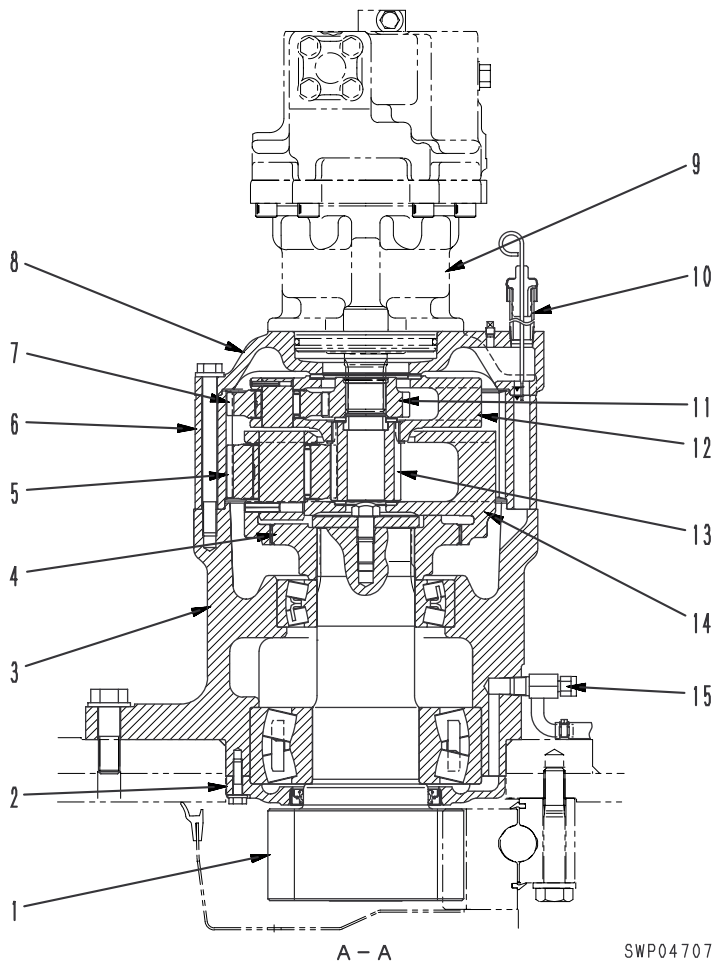
SWING MACHINERY



- 1. Swing pinion (No. of teeth: 13)
- 2. Cover
- 3. Case
- 4. Coupling
- 5. No. 2 planetary gear (No. of teeth: 36)
- 6. Ring gear (No. of teeth: 95)
- 7. No. 1 planetary gear (No. of teeth: 33)
- 8. Cover
- 9. Swing motor
- 10. Oil level gauge
- 11. No. 1 sun gear (No. of teeth: 28)
- 12. No. 1 planetary carrier
- 13. No. 2 sun gear (No. of teeth: 21)
- 14. No. 2 planetary carrier
- 15. Drain plug

Specifications

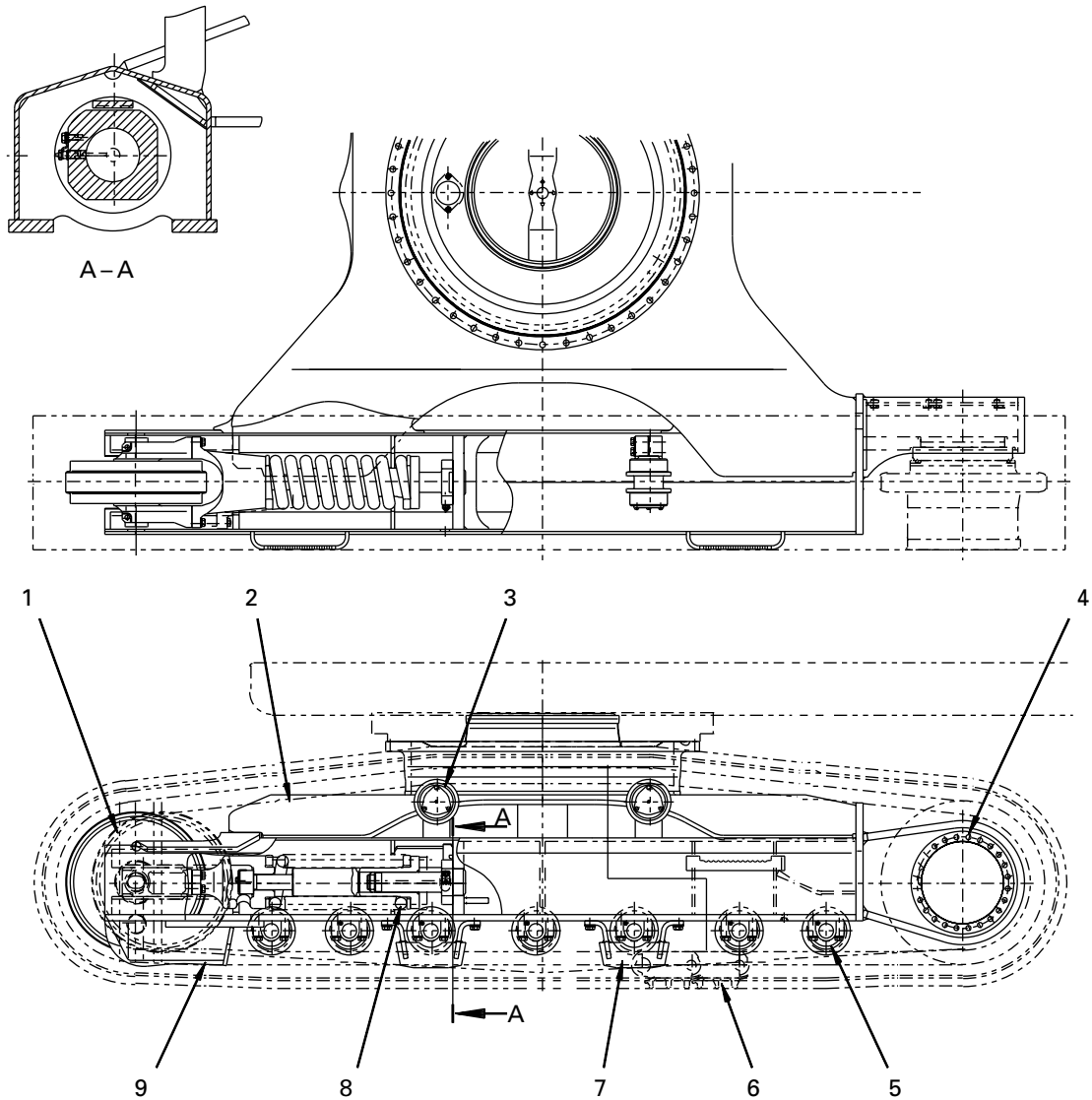
Reduction ratio: $\frac{28+95}{28} \times \frac{21+95}{21}$
 = 24.265



SWP04707

TRACK FRAME, RECOIL SPRING

★ The diagram shows the PC340-6K



SAP00147

1. Idler
2. Track frame
3. Carrier roller
4. Final drive
5. Track roller
6. Track shoe
7. Center guard
8. Recoil spring
9. Front guard

- The dimensions and number of track rollers may differ according to the model, but the basic structure is the same.
- No. of track rollers.

Model	No. of rollers (each side)
PC340-6K	7
PC340LC-6K, PC340NLC-6K	8

TRACK SHOE

Standard shoe

Item \ Model	PC340-6K	PC340LC-6K	PC340NLC-6K	
Shoe width (mm) (triple shoe)	600	700	600	
Link pitch (mm)	216	216	216	
No. of shoes (each side)	45	48	48	

Selection of track shoe

- Select the most suitable track shoe from the following table

	PC340-6K		PC340LC-6K		PC340NLC-6K		
	Specifications	Category	Specifications	Category	Specifications	Category	
Standard	600 mm triple	A	700 mm triple	B	600 mm triple	A	
Option	700 mm triple	B	600 mm triple	A	-	-	
Option	800 mm triple	C	800 mm triple	C	-	-	
Option	900 mm triple	C	900 mm triple	C	-	-	

Category	Use	Precautions when using
A	Rocky ground, normal river soil	<ul style="list-style-type: none"> Travel in Lo speed when traveling on rough ground with obstacles such as large boulders and fallen trees.
B	Normal soil, soft land	<ul style="list-style-type: none"> Cannot be used on rough ground where there are large obstacles such as boulders and fallen trees. Travel in Hi speed only on flat ground; when it is impossible to avoid traveling over obstacles, lower the travel speed to approx. half of Lo speed.
C	Extremely soft ground (swampy ground)	<ul style="list-style-type: none"> Use only for ground where "A" and "B" sink and are impossible to use. Cannot be used on rough ground where there are large obstacles such as boulders and fallen trees Travel in Hi speed only on flat ground; when it is impossible to avoid traveling over obstacles, lower the travel speed to approx. half of Lo speed.
D	Paved surface	<ul style="list-style-type: none"> The shoes are flat, so they have low gradeability
E	Paved surface	<ul style="list-style-type: none"> The shoes are made of rubber, so be careful when traveling on rough ground

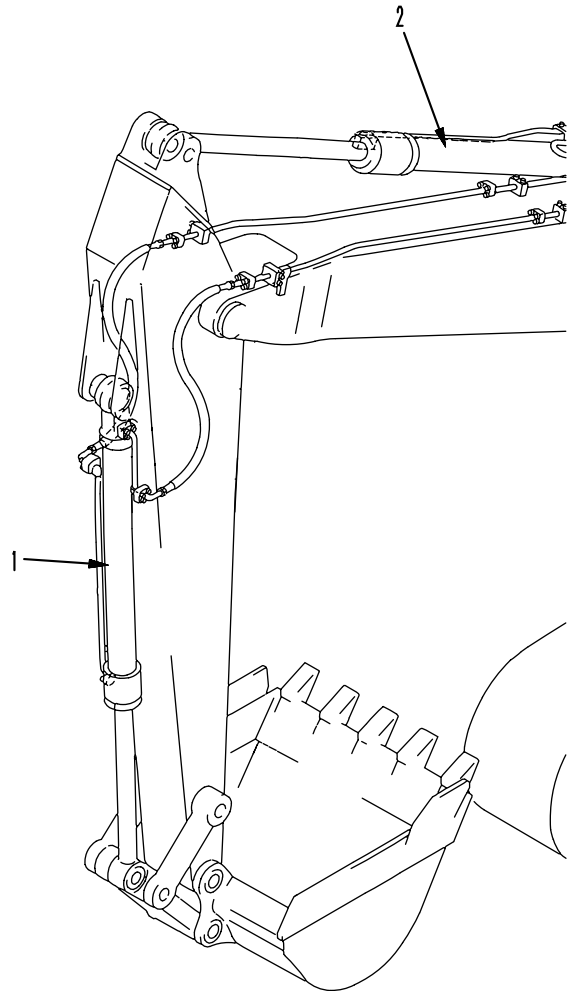
★ Categories "B" and "C" are wide shoes, so there are restrictions on their use. Therefore, before using, check the restrictions and consider carefully the conditions of use before recommending a suitable shoe width. If necessary, give the customer guidance in their use.

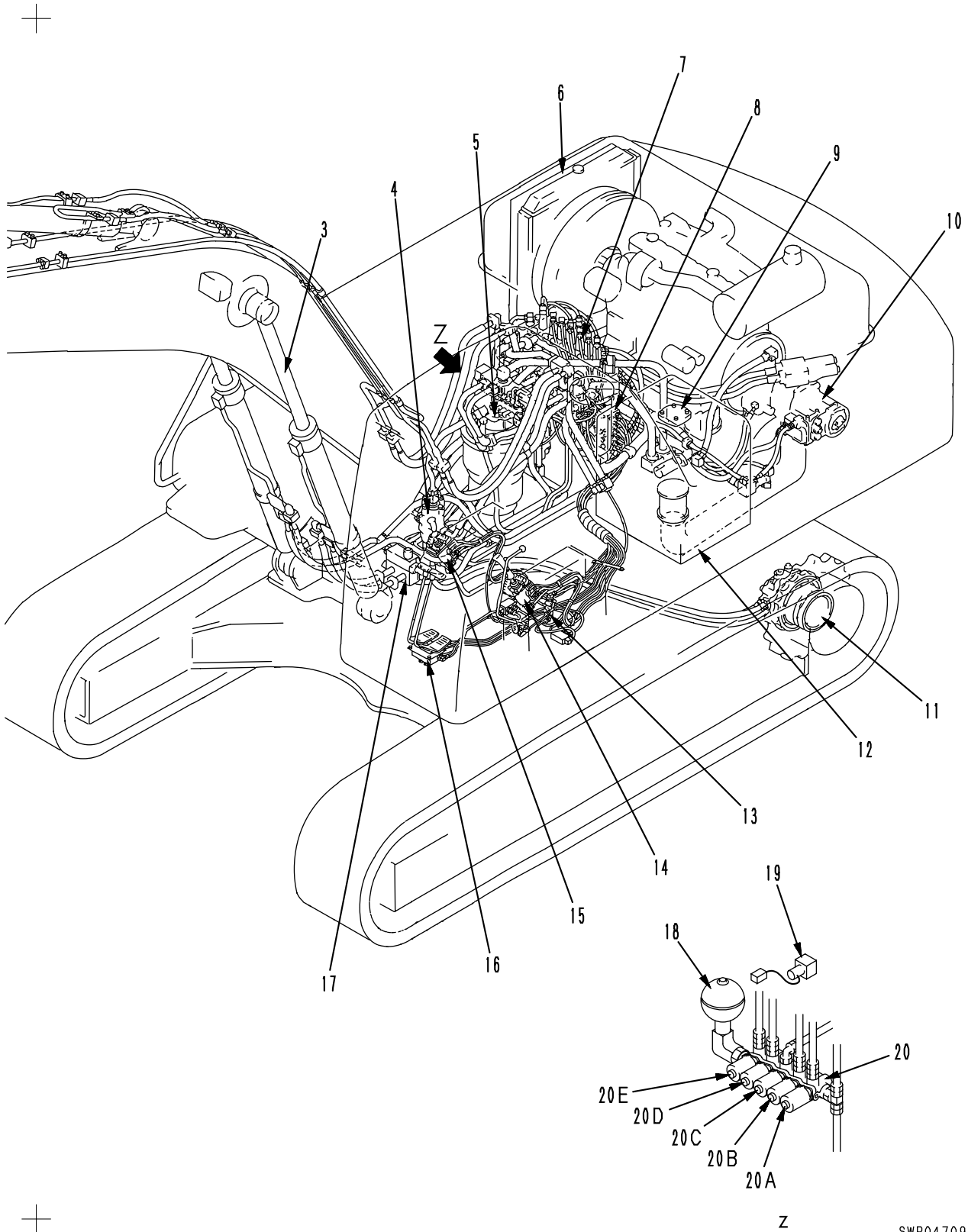
★ When selecting the shoe width, select the narrowest shoe possible within the range that will give no problem with flotation and ground pressure. If a wider shoe than necessary is used, there will be a large load on the shoe, and this may lead to bending of the shoe, cracking of the links, breakage of the pins, loosening of the shoe bolts, or other problems.

HYDRAULIC PIPING DRAWING



1. Bucket cylinder
2. Arm cylinder
3. Boom cylinder
4. Center swivel joint
5. Swing motor
6. Oil cooler
7. Control valve
8. PPC shuttle valve
9. Hydraulic filter
10. Hydraulic pump
11. L.H. travel motor
12. Hydraulic tank
13. PPC safety lock valve
14. L.H. PPC valve
15. R.H. PPC valve
16. Travel PPC valve
17. Boom holding valve
18. Accumulator
19. Active mode solenoid valve (Swing)
20. Solenoid valve assembly
 - 20A. Swing brake solenoid valve
 - 20B. Travel speed solenoid valve
 - 20C. Merge/flow divider solenoid valve
 - 20D. Boom Hi 2-stage safety solenoid valve
 - 20E. Active mode solenoid valve (Boom)





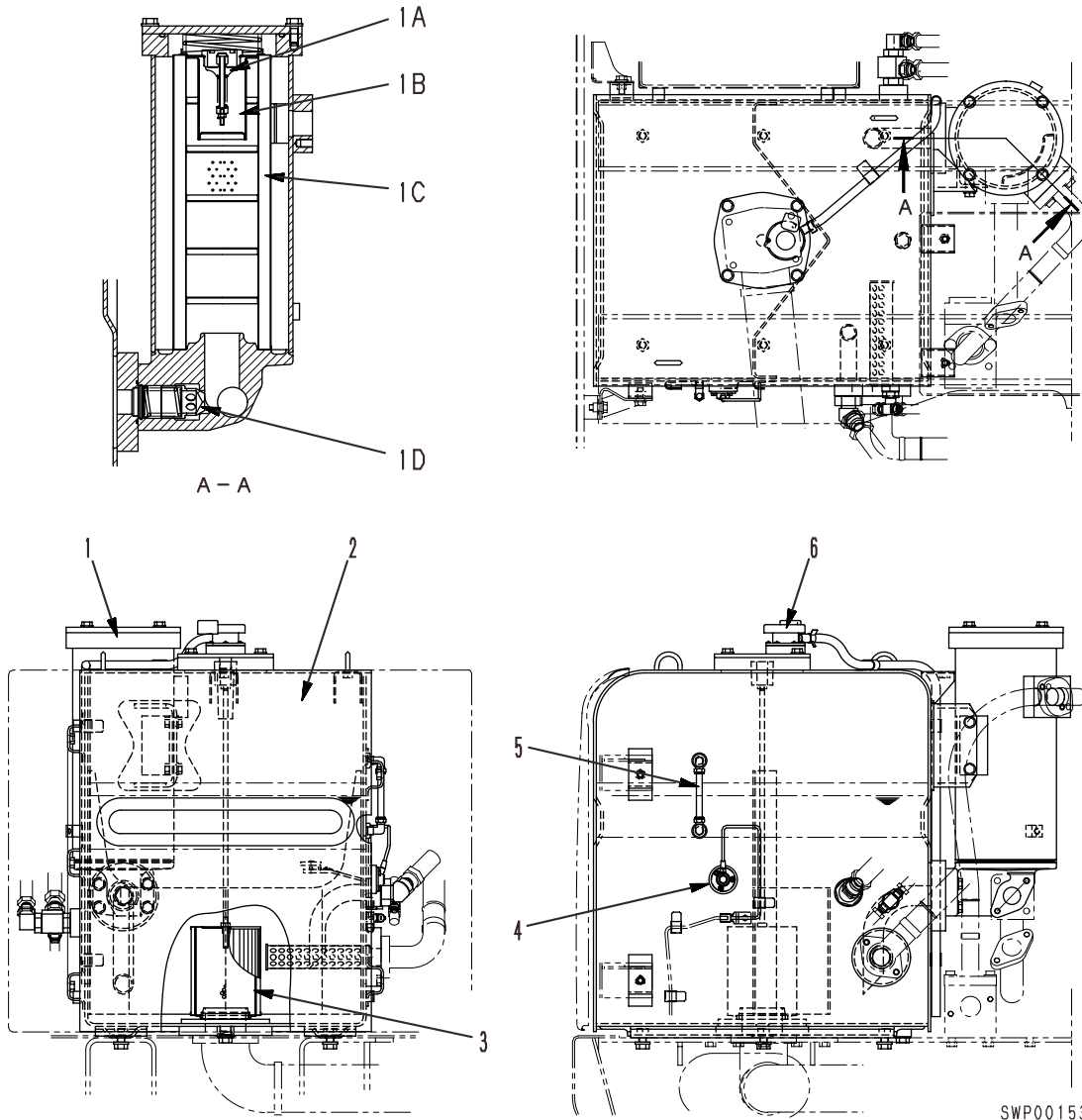
SWP04709

HYDRAULIC CIRCUIT DIAGRAM

★ For details of this page, see Section 90.

HYDRAULIC TANK, HYDRAULIC FILTER

K32001 - K31999



- 1. Hydraulic filter
 - 1A. Bypass valve
 - 1B. Strainer
 - 1C. Element
 - 1D. Cooler check valve
- 2. Hydraulic tank
- 3. Suction strainer
- 4. Hydraulic oil level sensor
- 5. Sight gauge
- 6. Oil filler cap

Specifications

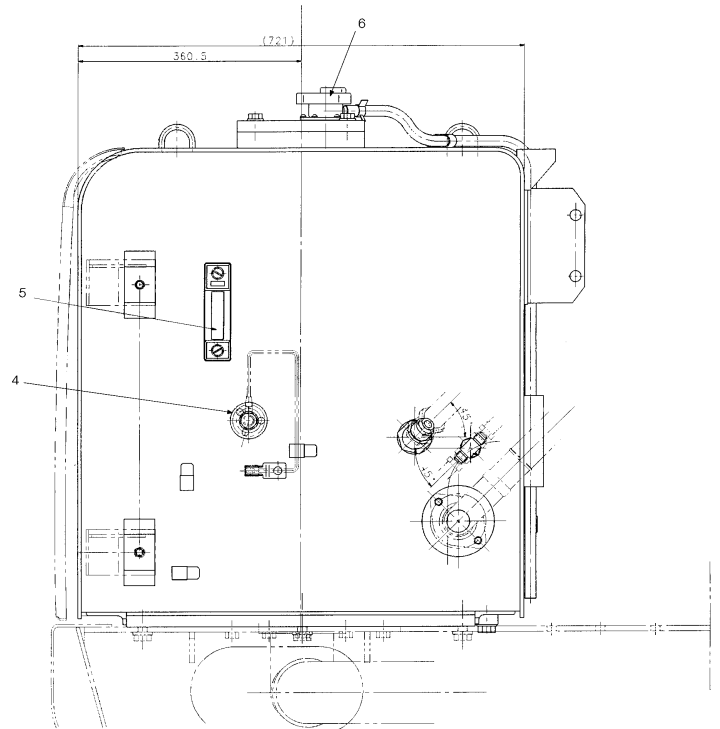
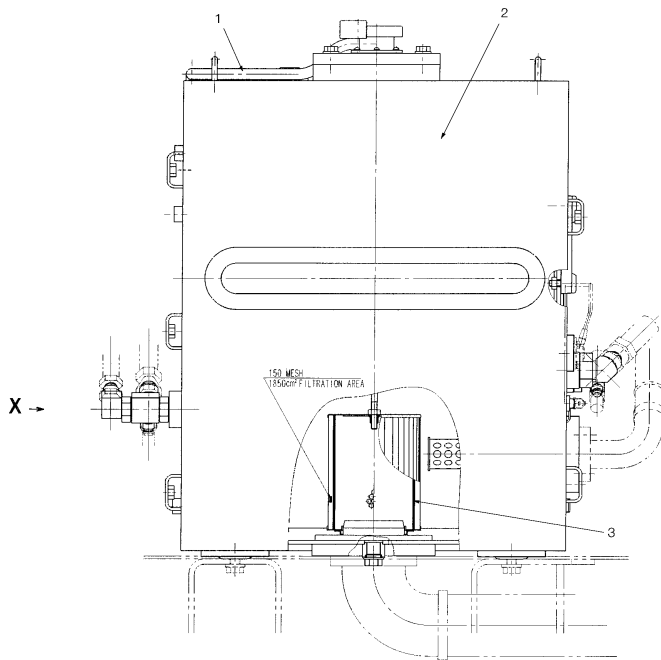
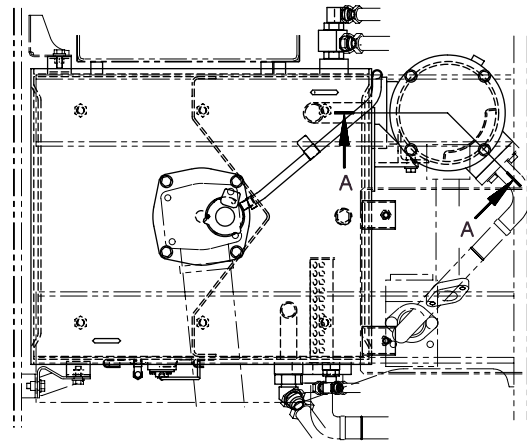
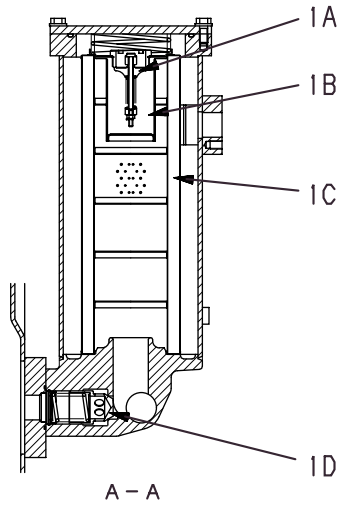
Tank capacity: 315 ℓ
 Amount of oil inside tank: 207 ℓ (at H level)

Safety valve

- Relief cracking pressure: 16.7 ± 6.9 kPa
 {0.17 ± 0.07 kg/cm²}
- Suction cracking pressure: 0 – 0.49 kPa
 {0 – 0.005 kg/cm²}
- Bypass valve set pressure: 102.9 ± 19.6 kPa
 {1.05 ± 0.2 kg/cm²}

HYDRAULIC TANK, HYDRAULIC FILTER

K34001 and up



1. Hydraulic filter
 - 1A. Bypass valve
 - 1B. Strainer
 - 1C. Element
 - 1D. Cooler check valve
2. Hydraulic tank
3. Suction strainer
4. Hydraulic oil level sensor
5. Sight gauge
6. Oil filler cap

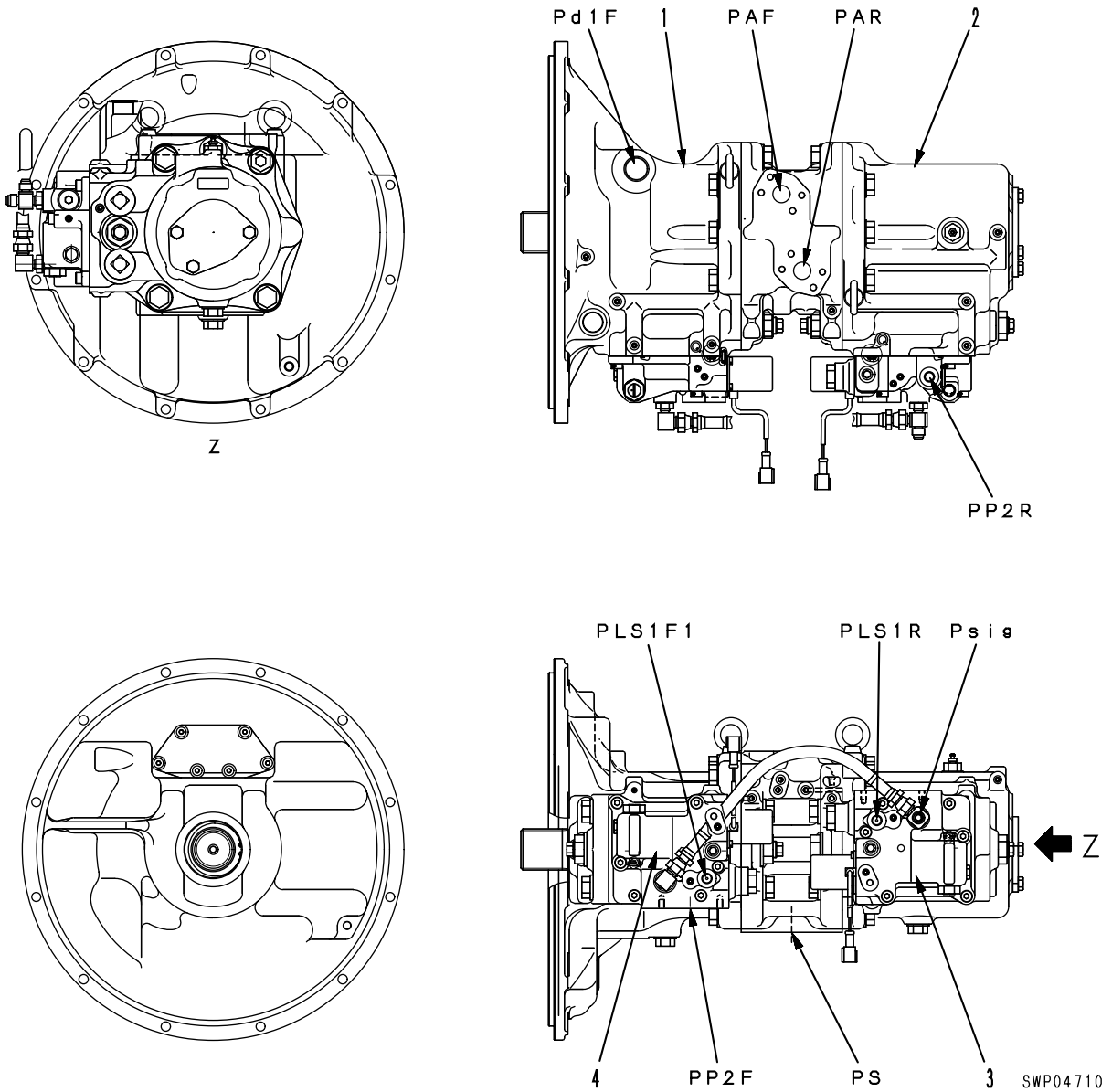
Specifications

Tank capacity: 315 ℓ
 Amount of oil inside tank: 207 ℓ (at H level)

Safety valve

- Relief cracking pressure: 16.7 ± 6.9 kPa
 {0.17 ± 0.07 kg/cm²}
- Suction cracking pressure: 0 – 0.49 kPa
 {0 – 0.005 kg/cm²}
- Bypass valve set pressure: 102.9 ± 19.6 kPa
 {1.05 ± 0.2 kg/cm²}

HYDRAULIC PUMP



- 1. Front main pump
- 2. Rear main pump
- 3. Rear TVC, LS valve
- 4. Front TVC, LS valve

- PS : Pump suction
- PAF : Front delivery
- PAR : Rear delivery
- PP2F : Front pump delivery pressure
- PP2R : Rear pump delivery pressure
- PLS1R : Rear LS pressure
- PLS1F1: Front LS pressure
- Pd1F : Pump drain
- Psig : LS control pressure EPC pressure

Outline

This pump consists of two variable displacement swash plate type piston pumps and TVC, LS valves.



Thank you very much
for your reading.
Please click here
to get more information.