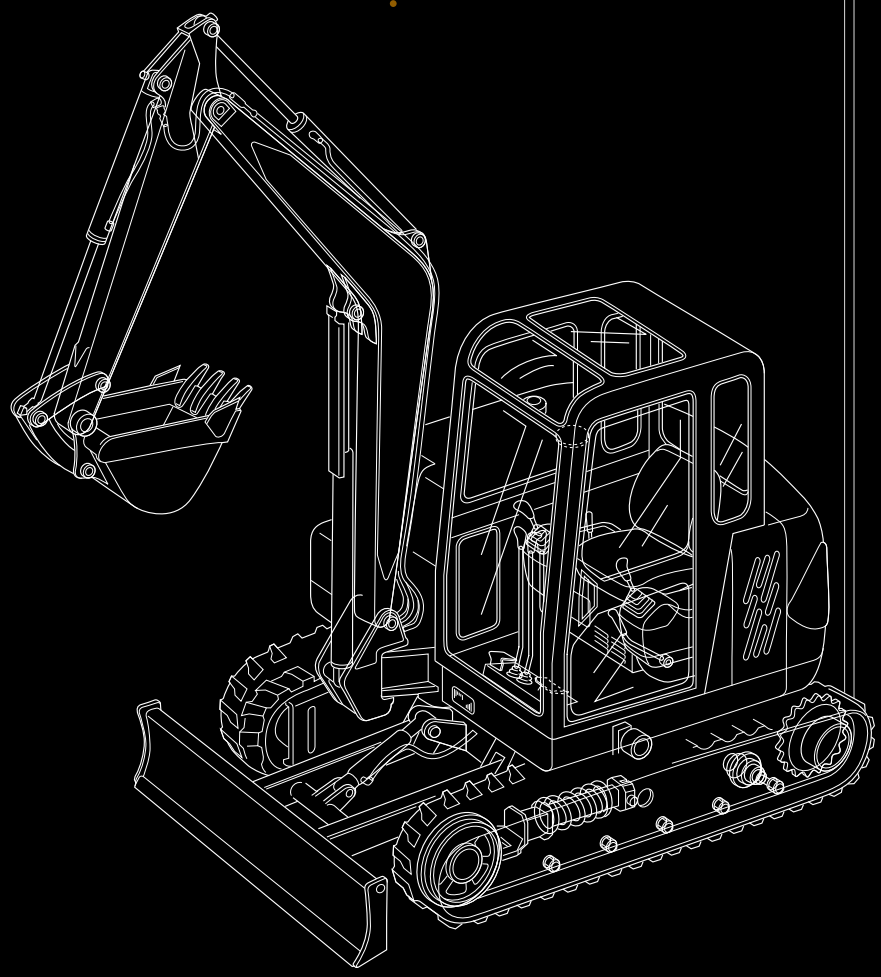
H75C

HANIX

Japanese Craftsmanship

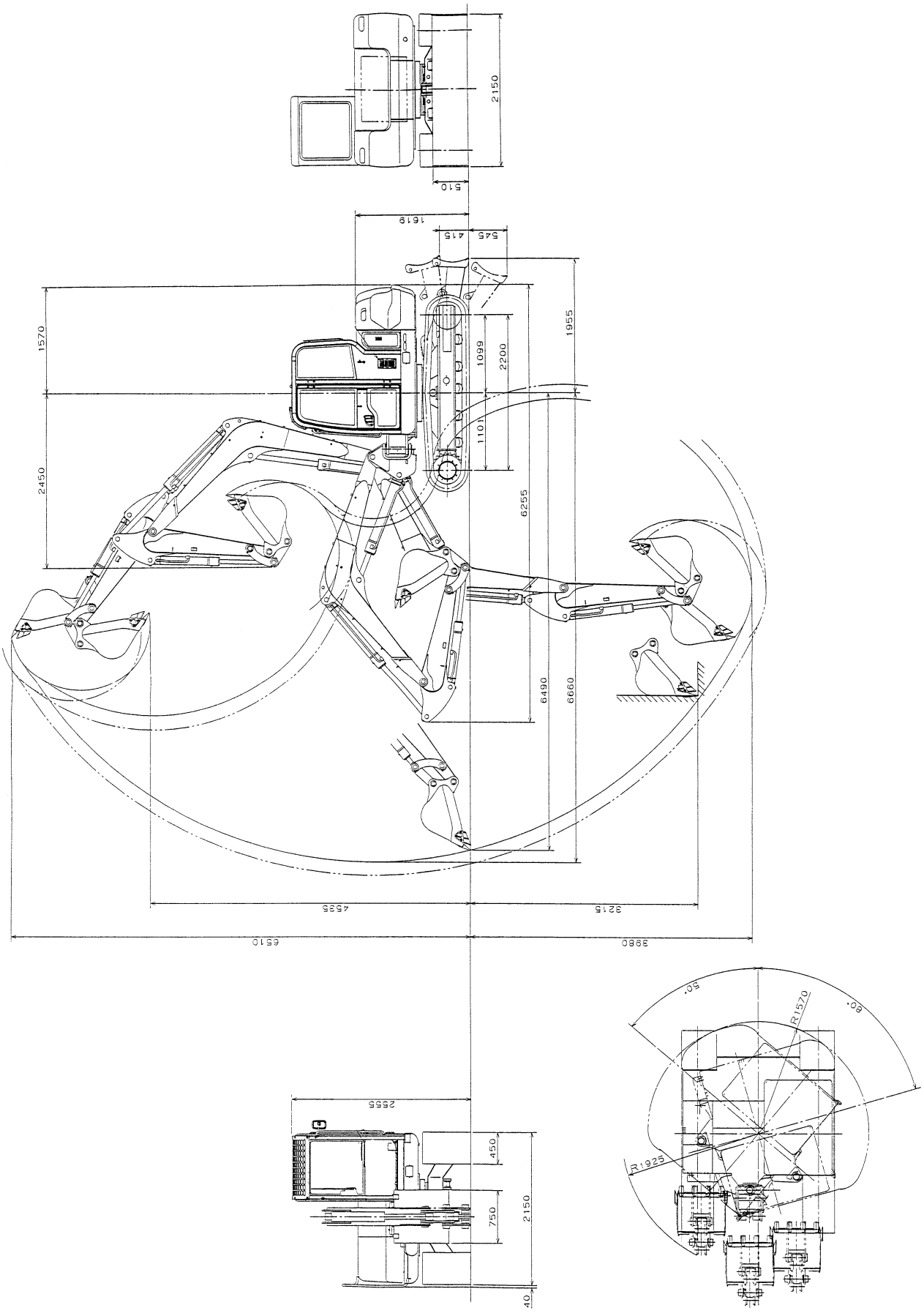


H75C

Service Manual

Japanese Craftsmanship

2-3 Dimensions and Specifications



2-7-4 Maintenance every 50 service hours

	Item	Content	Remarks
1	Engine oil pan	Replace engine oil and filter	Only for a new machine. After this, every 250 service hours
3	Engine valve clearance	Inspect and adjust	Only for a new machine. After this, every 500 service hours
5	Fuel tank	Drain sediment and water	Remove the drain plug on the lower part of the tank
		Clean the strainer	Wash strainer with diesel fuel
	Radiator fin	Clean the fins	Dust sticking to the fin affects the cooling effect and causes overheating
6	Slew bearing	Inspect and grease	Always grease the machine after it is used in water
12	Battery	Liquid quantity	Whether the liquid level is proper or not. If short, add distilled water
14	Battery	Specific gravity	1.26 when fully charged; 1.20 when discharged (Recharge the battery when 1.20.)
		Clean	Clean each part, brush and connect terminal and apply grease
20	Each oil/grease supply point	Oil and grease	Refer to page 2-8

Unit: mm(in)

No.	Item	Criterion			Spacer	
		a	b	Standard clearance	Part Number	Dimension
1	Clearance between swing cylinder head and head bracket	92(3.62")	90(3.54")	2.0~3.5(0.08"~0.14")	NSS3-60009 NSS3-60010 NSS3-60011	ø71×t0.5 ø71×t1.0 ø71×t1.6
2	Clearance between swing cylinder rod and swing post	82(3.23")	80(3.15")	2.0~3.5(0.08"~0.14")	〃	〃
3	Clearance between swing post and frame	342.5(13.48")	342(13.46")	0.5~2.0(0.02"~0.08")		
4	Clearance between boom and swing post	302(11.89")	300(11.81")	2.0~4.5(0.08"~0.18")	NSS3-60009 NSS3-60010 NSS3-60011	ø61×t0.5 ø61×t1.0 ø61×t1.6
5	Clearance between boom cylinder head and swing post	92(3.62")	90(3.54")	2.0~3.5(0.08"~0.14")	〃	〃
6	Clearance between boom cylinder rod and boom	92(3.62")	90(3.54")	1.5~3.0(0.06"~0.12")	〃	〃
7	Clearance between arm cylinder head and boom	92(3.62")	90(3.54")	1.5~3.0(0.06"~0.12")	NSS3-60005 NSS3-60007 NSS3-60008	ø61×t0.5 ø61×t1.0 ø61×t1.6
8	Clearance between arm cylinder rod and arm	82(3.23")	80(3.15")	2.0~3.5(0.08"~0.14")	〃	〃
9	Clearance between boom and arm	222(8.74")	220(8.66")	1.5~3.0(0.06"~0.12")	〃	〃
10	Clearance between bucket cylinder head and arm	82(3.23")	80(3.15")	2.0~3.5(0.08"~0.14")	〃	〃
11	Clearance between bucket cylinder rod and dump link	82(3.23")	80(3.15")	1.5~3.0(0.06"~0.12")	〃	〃
12	Clearance between dump link and bucket	183(7.20")	180(7.09")	3.0~5.0(0.12"~0.20")	〃	〃
13	Clearance between arm and bucket link	180(7.09")	180(7.09")	0.0~0.5(0"~0.02")	〃	〃
14	Clearance between arm and bucket	183(7.20")	180(7.09")	3.0~3.5(0.12"~0.14")	〃	〃
15	Clearance between dozer and frame	68(2.68")	65(2.56")	3.0~4.0(0.12"~0.16")		
16	Clearance between dozer cylinder rod and frame	82(3.23")	80(3.15")	2.0~3.0(0.08"~0.12")		
17	Clearance between dozer cylinder head and dozer	82(3.23")	80(3.15")	2.0~3.5(0.08"~0.14")		

(3) Cleaning or replacing when spraying badly

(a) Loosen the nozzle retaining nut to remove the nozzle tip assembly. Clean the needle valve and the nozzle tip body.

⚠ CAUTION

When removing the nozzle tip assembly, never tap on the end of the assembly.

(b) Wash the needle valve and the nozzle tip body in clean wash oil. Reassemble them in clean light oil.

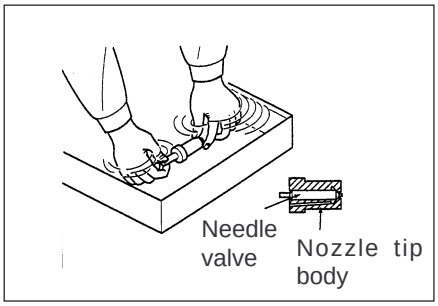
Note: The needle valve and the nozzle tip body are precision machined parts. Handle with care and never change their combination.

(c) Assemble the fuel injection nozzle, tightening the nozzle retaining nut to the specified torque.

(d) If the fuel spray pattern is still not good, replace the nozzle tip assembly.

Note: (a) Never touch the sliding surface of the needle valve wih your hands.

(b) If the nozzle tip assembly is to be replaced, remove the seal peel (synthetic resin film) from the new nozzle tip assembly, and slide the nozzle and needle valve in clean wash oil to remove the anti-corrosive agent completely.



Cleaning fuel injection nozzle tip components

5-4 Performance test of the hydraulic pump

5-4-1 Measuring instrument

Hydraulic pressure tester	Measuring range of flow rate (ℓ/min)	7~200 ℓ
	Measuring range of pressure (MPa)	0 ~ 34.3
	Measuring range of temperature (°C)	0 ~ 150
	Port size	PF1 O ring type
	Pressure gauge	49 MPa, 4.9 MPa
	Tachometer	Diesel tachometer (digital type)
	Hose for testing	Equivalent to the hose of 27.4 MPa high pressure (Nominal size PF1/ 2-PF1/ 2 × 1m)

5-4-2 Preparation

1. Park machine on flat ground and stop engine.

5-4-3 Connecting tester

1. Remove the hose on the pump port of the control valve.
2. Connect the removed hose to the outlet of the tester.
3. Connect the hose on the discharge of the pump to the inlet of the tester.
4. Connect pressure gauge to port measuring port.

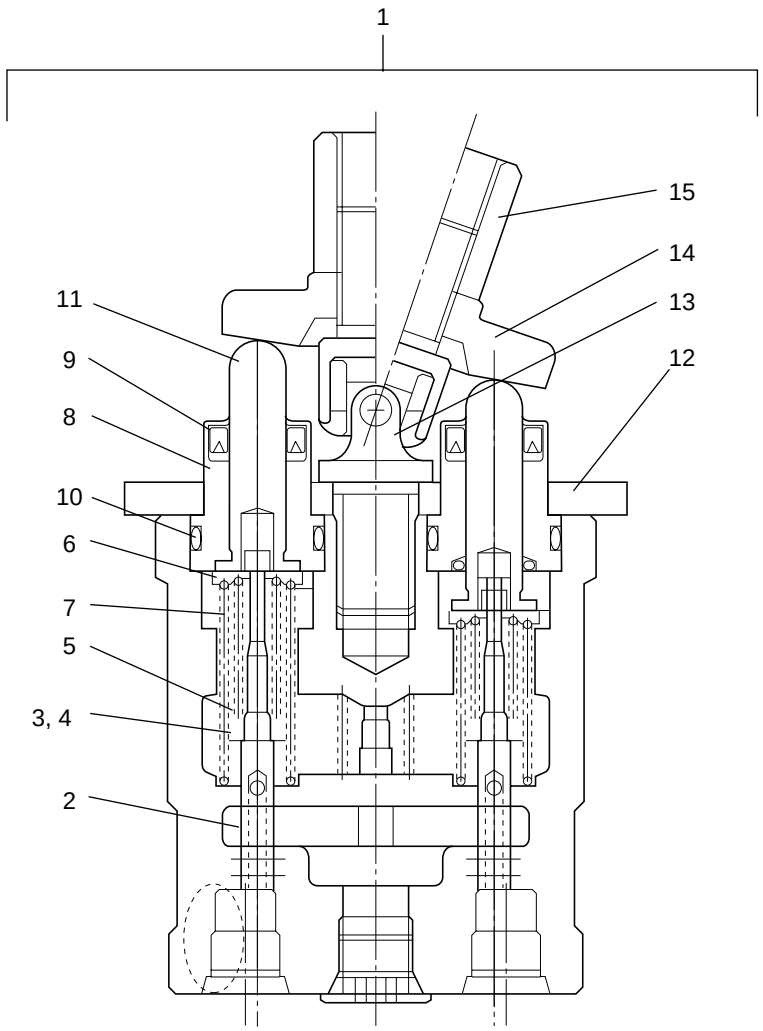
5-4-4 Measuring procedure

Open the throttle valve of the tester and start the engine. Read the pressures on the pressure gauge and measure the flow at that time. At the same time, record the engine speed.

7 CONTROL VALVE

CONTENTS

8-2 Structure



1	JOYSTICK VALVE ASS'Y	9	SEAL, OIL
2	SPOOL	10	O-RING
3	SPACER	11	PUSHER
4	SHIM	12	PLATE
5	COMPRESSER, SPRING	13	JOINT, UNIVERSAL
6	GUIDE, SPRING	14	CAM
7	COMPRESSER, SPRING	15	SCREW, JOINT
8	BUSHING		

11 PILOT VALVE(3) (DOZER)

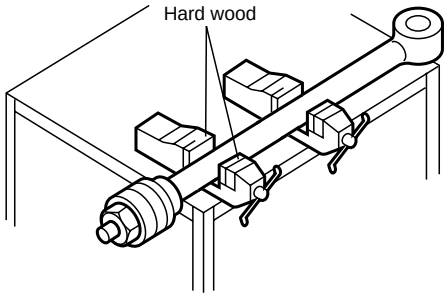
CONTENTS

13 TRAVEL MOTOR

CONTENTS

5. Disassembling the piston assembly
   Hold the piston rod assembly with vice.
   - •Put the waste between hard wood and the piston to prevent the surface sliding from being damaged.
   - •Set the piston rod assembly on a level block so that it becomes parallel to the level block.

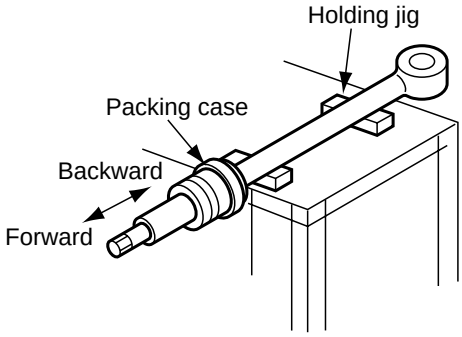
   Be careful because the piston rod assembly may come out of the vice and be damaged if it is set diagonally.



14-2-2 Procedure for disassembling inner parts

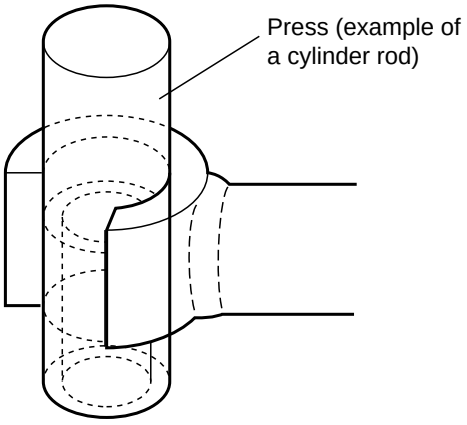
1. Remove the piston assembly from the piston rod assembly (after removing the set bolts). Then remove the cushion bearing in the direction of the arrow.

2. Disassembling rod cover
   Put piston rod assembly on a holding jig on the work bench.
   Make a working face for the rod cover assembly on the workbench and move the rod cover to and fro to remove it.
   Remove the backup ring then the O ring with a screwdriver. If they are to be reused, be careful not to damage them.



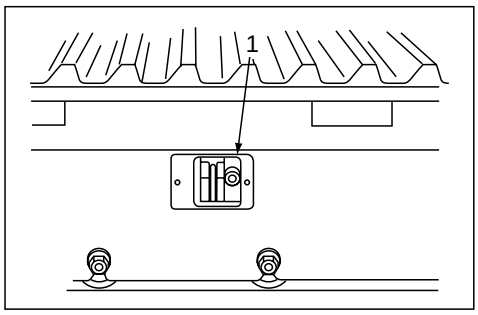
3. Disassembling the packing assembly
   Remove the packing by prying it with an eyeleteer or a screwdriver. Be careful not to damage the groove of the cover and piston. Because it is difficult to remove the dust seal and rod packing without damaging them, remove them by inserting a eyeleteer or a similar tool and prying them out. Be careful not to damage the groove on the cover and piston.

4. Disassembling the piston rod and cylinder tube assembly
   As the bushes are pressed to fit the rod head, press them out with a pressing machine to remove them. For a spherical bearing, the snap ring must be removed first.



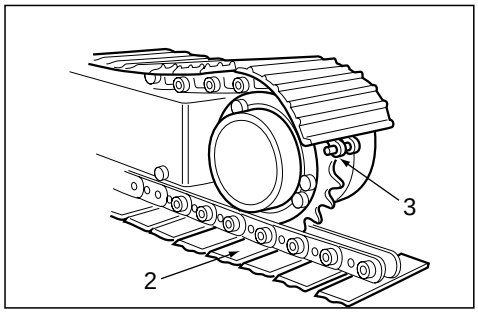
16-3-2 Removing the crawler

1. Loosen the crawler.
   By loosen the cartridge valve (1) of the adjust cylinder, drain grease and loosen the crawler (2).



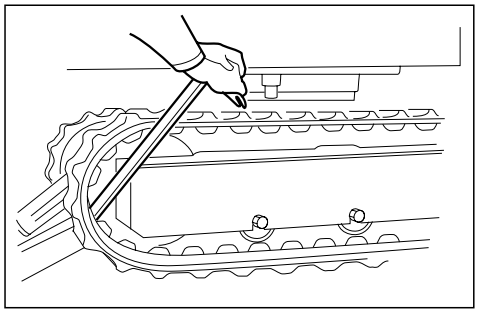
2. Crawler

1) Lift the main frame with attachment and put blocks under to lift the machine.



2) Turning in the direction of the idler side, remove crawler master pin (3) and then the crawler (2) from track frame.
   Weight (steel crawler): 850 kg (425×2)

3) As rubber crawler is endless and of solid material, push the idler to the end and remove the rubber crawler by using steel bar from the idler.
   Weight (rubber crawler): 740 kg (370×2)



18 IDLER

CONTENTS

21 CARRIER ROLLER

CONTENTS

23-2-2 Travelling meander by slow speed on only right (left) hand side.