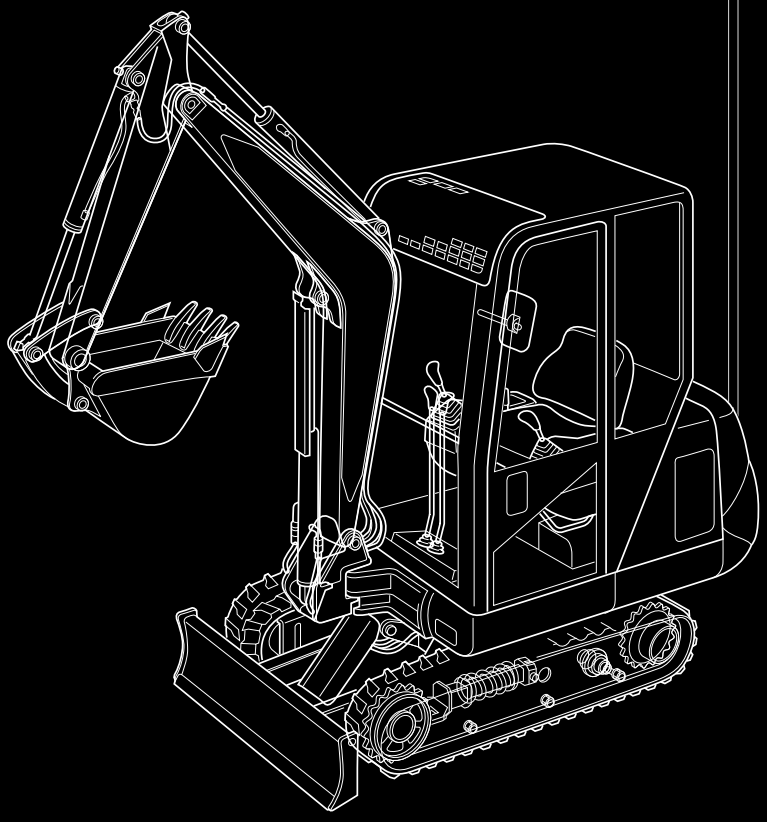
H15B-2
H15B-Plus2

HANIX
Japanese Craftsmanship

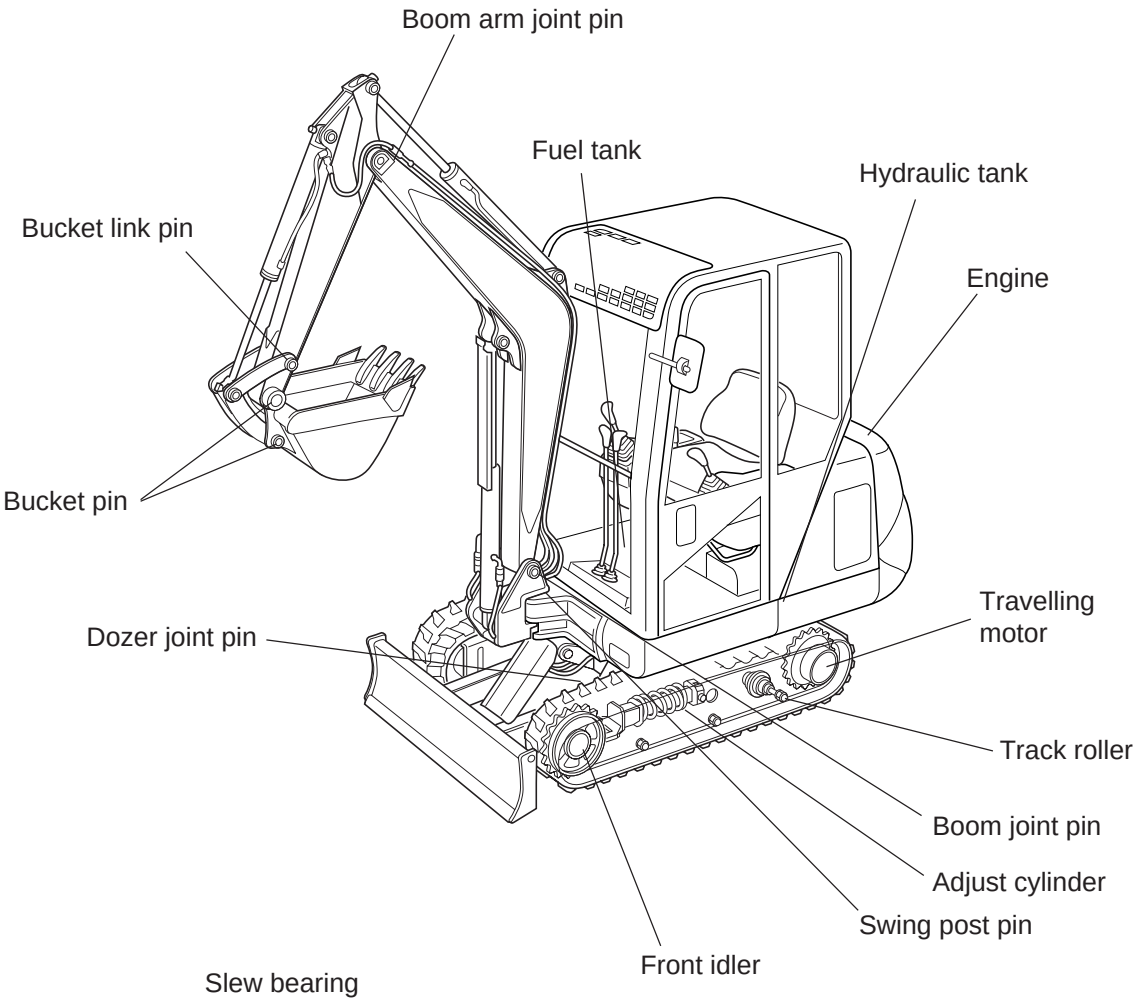


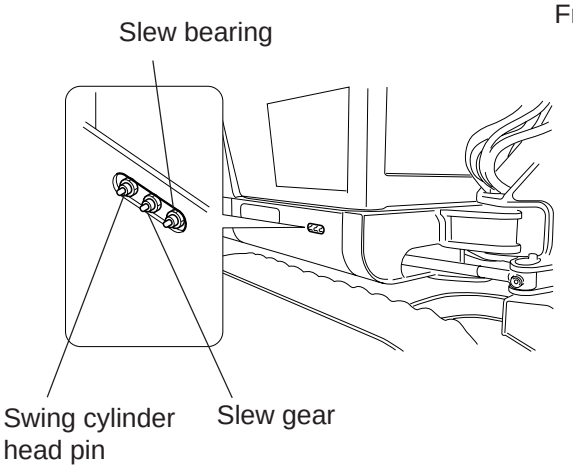
H15B-2
H15B-Plus2

Service Manual

Japanese Craftsmanship

2-5 Oil and grease supply points

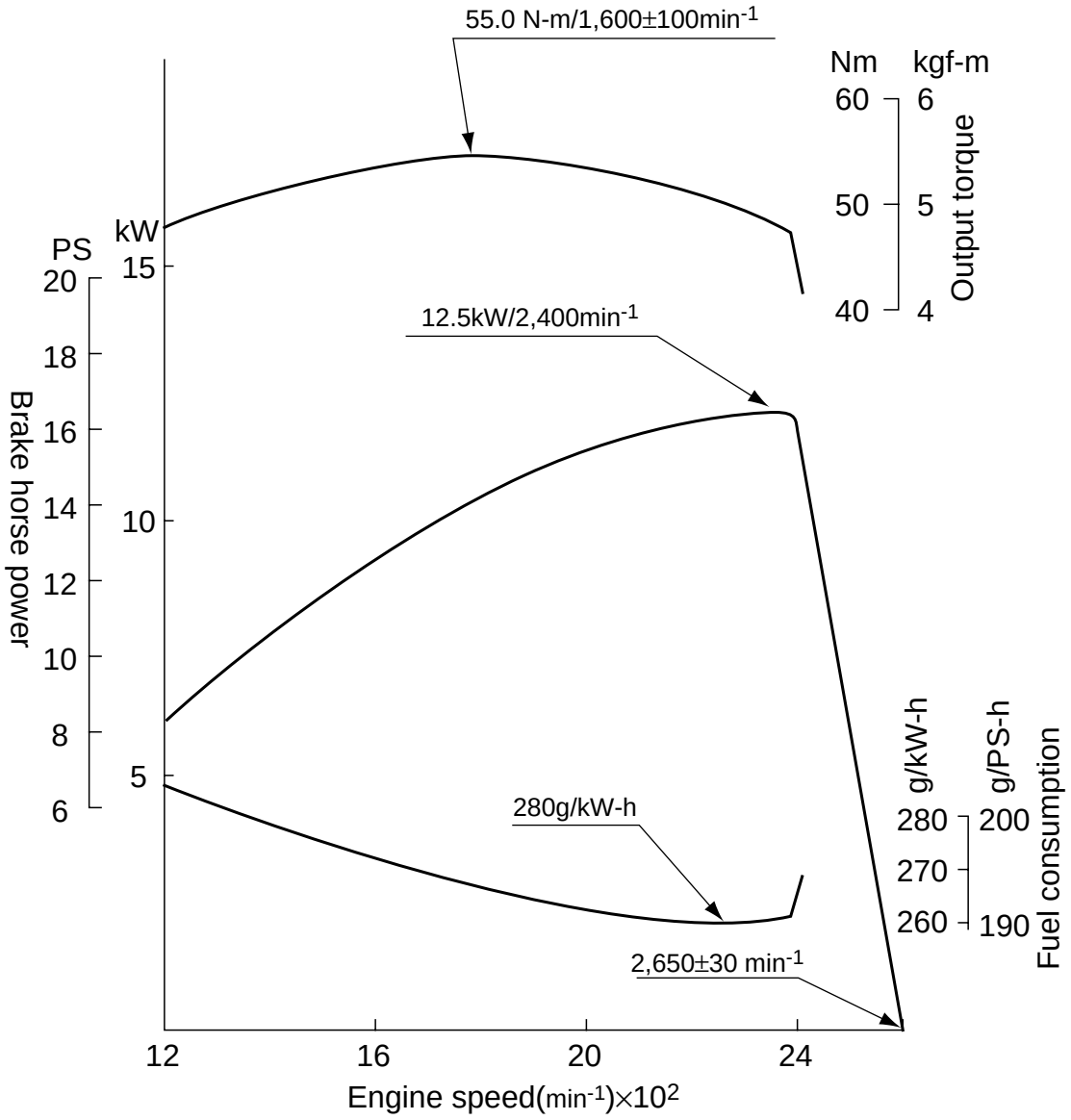




Item	
Boom cylinder	ø60×ø35–360st
Arm cylinder	ø60×ø35–396st
Bucket cylinder	ø60×ø35×300st
Swing cylinder	ø60×ø30–339st
Dozer cylinder	ø60×ø30×100st
Slew motor	2-1600DOS-E3754
Travelling motor	MAG-12V-110E

	Item		H15B-2
Pump capacity	P1		6.5cm^3(1.0 in^3)/rev
	P2		6.5cm^3(1.0 in^3)/rev
	P3		6.5cm^3(1.0 in^3)/rev
Pressure	Main relief	P1	18.6MPa(2,703 psi)(190kgf/cm^2)
		P2	18.6MPa(2,703psi)(190kgf/cm^2)
		P3	18.6MPa(2,703psi)(190kgf/cm^2)
	Port relief		20.6MPa(2,987 psi)(210kgf/cm^2)
	Slew		9.32MPa(1,351 psi)(95kgf/cm^2)
Pump flow rate	Q1		15.7 ℓ (3.4gal, 4.1 U.S. gal, 957in^3)/min.
	Q2		15.7 ℓ (3.4gal, 4.1 U.S. gal, 957in^3)/min.
	Q3		15.7 ℓ (3.4 gal,4.1U.S. gal, 957 in^3)/min.
Engine	Type		L3E-W231NSA
	Constant output		12.5kW(17ps)
	Speed		2,400min^{-1}
	Torque		55 N-m(40.5 lb-ft)/600min^{-1}

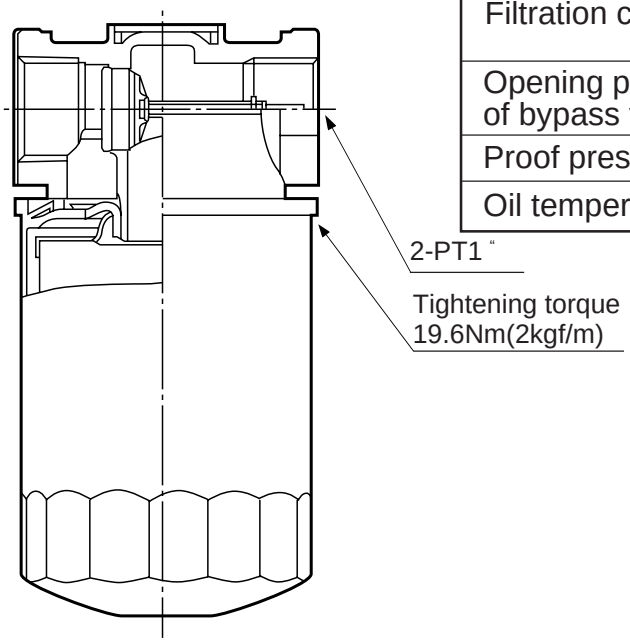
4-2 Performance curve



6-2 Hydraulic oil filter

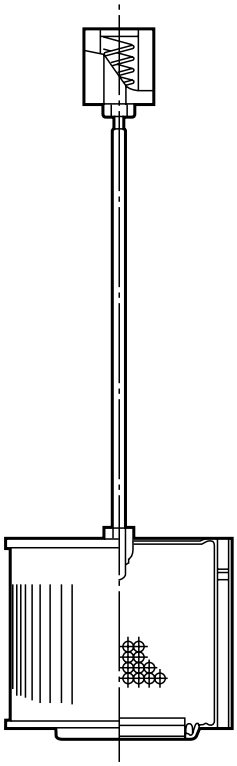
6-2-1 Line filter (SP08)

Filtration accuracy	10μ
Filtration capacity	50 ℓ (27.5 gal,13.2 U.S. gal, 3050 in^3)/min (Max.)
Opening pressure of bypass valve	0.15MPa (1.5kgf/cm^2)
Proof pressure	0.69MPa(7kgf/cm^2)
Oil temperature	-20°C~120°C



6-2-2 Suction filter

Grain size	100 mesh
Oil temperature	-20°C~120°C



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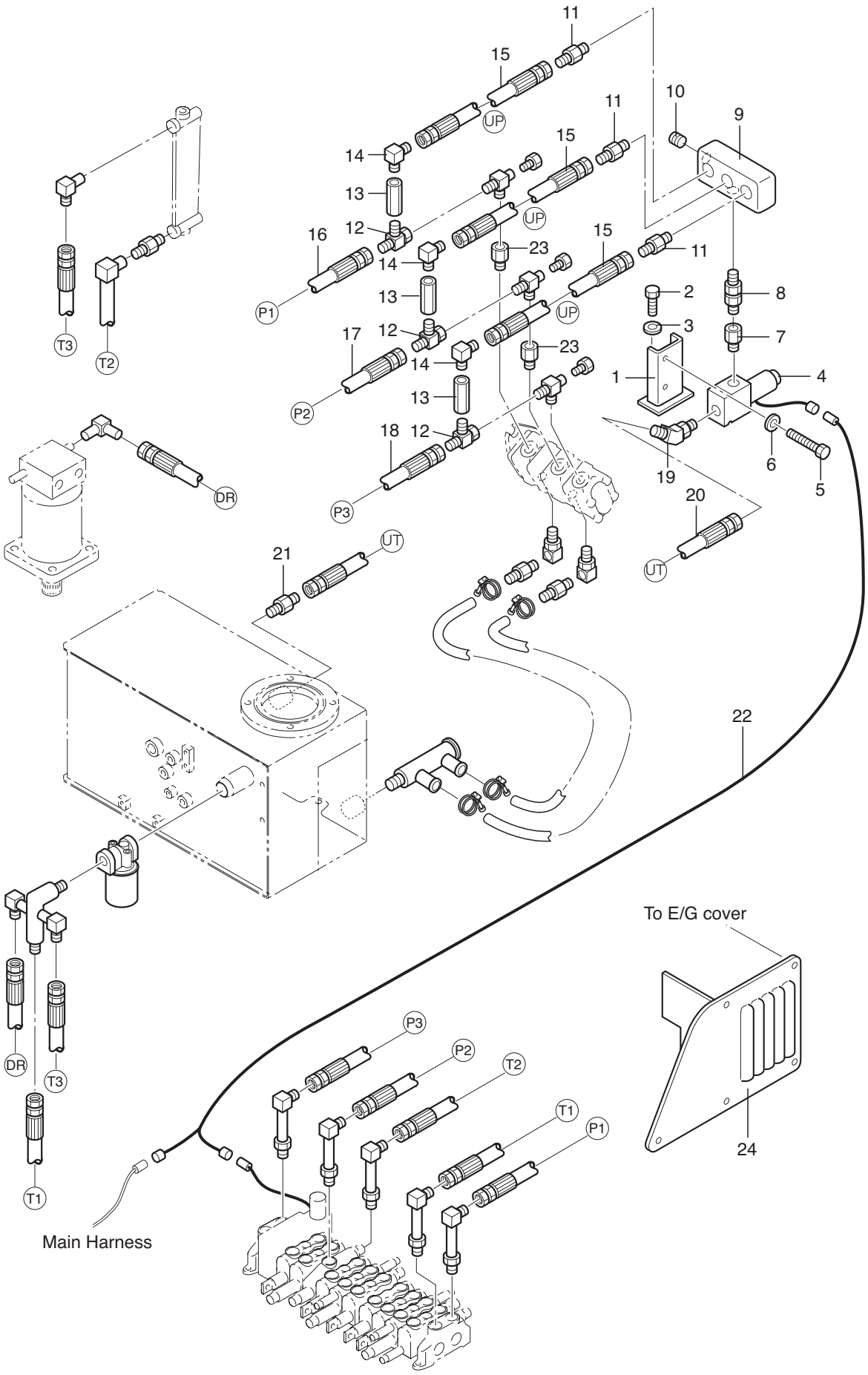
アンロードバルブ
UNLOAD VALVE PIPING

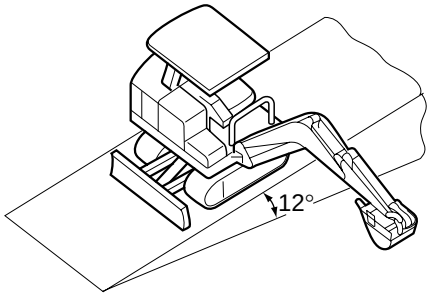


9-4 Inspection and adjustment

9-4-1 Measuring the natural slew distance

1. Position of the machine

Maintain the hydraulic oil temperature at 50±5°C. Make a slope or use a sleeper to incline the machine by 12°. Set the attachment diagonally, put a weight (W) in the bucket (filling the bucket with soil), retract the arm cylinder to the minimum length, make the boom parallel to the slope and stop engine.



2. Measurement

Put a mark on the slew bearing outer race and the truck frame and measure the flow rate (deviation rate) of 3 minutes. (Moving distance of slew bearing outer race)Valid gear length

Unit mm(in) or less

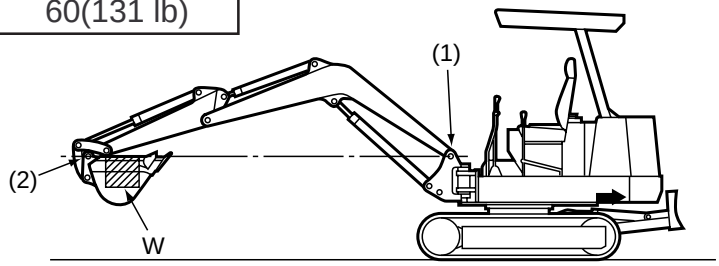
Standard value	Allowance	Weight W kg(lb)
100(3.9")	200(7.9")	60(132 lb)

9-4-2 Measuring the over slew distance after stopping

Maintain the oil temperature at 50±5°C while the engine is running at full speed. Stretch the arm to the maximum length on a flat place. Make the boom joint pin (1) and arm bucket pin (2) put on a horizontal line, put a weight(W) in the bucket (filling the bucket with soil), slew the Machine by one turn and measure the over slew length (at bucket edge) after stopping.

Unit : deg

Standard value	Weight W kg(lb)
45	60(131 lb)



9-4-3 Measuring the required time for slewing

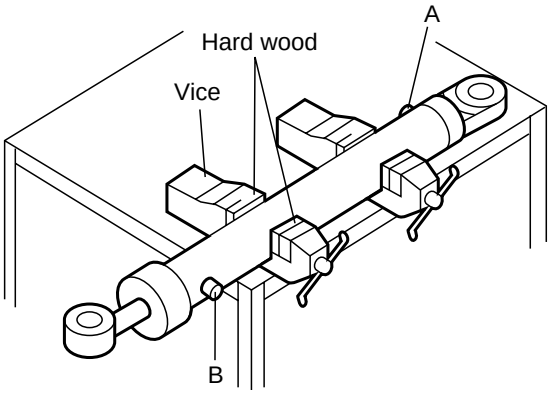
Extend the bucket cylinder to maximum length, empty the bucket and measure the required time for slewing 5 turns following the first turn.

Unit : sec or less

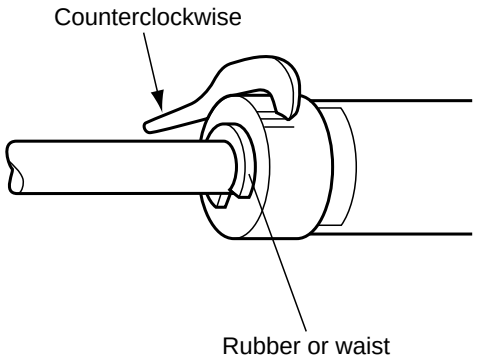
Standard value	Allowance
26±4	42

11-2-1 Disassembly procedure

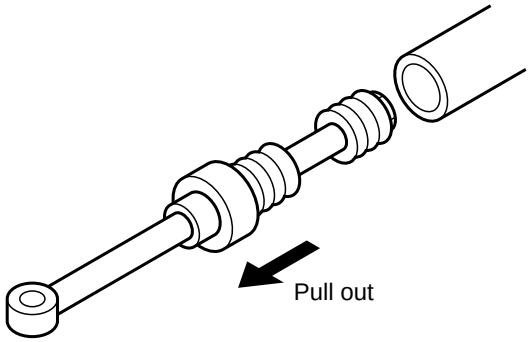
1. Hold the cylinder with the vice.
   Tighten the vice carefully; do not deform the cylinder. Blow air alternately from ports A and B and operate the piston rod to drain oil from the cylinder inside. To remove the piston, pull the piston rod about a third of the length.



2. Loosen and remove the cylinder head from the cylinder tube assembly with a hook wrench.

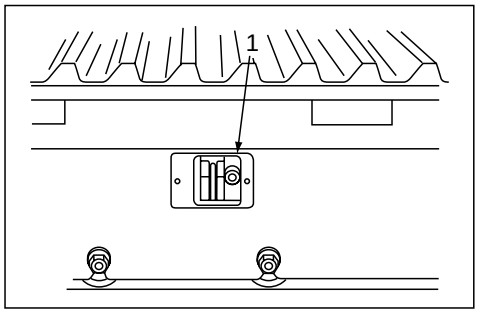


3. Disassembling the piston rod assembly
   Slowly turn the piston rod assembly to remove it from the cylinder tube assembly. Place the removed piston rod assembly on a wooden bench or a waste to prevent damage.



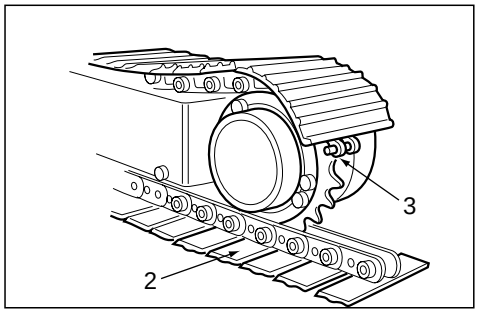
13-3-2 Removing the crawler

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

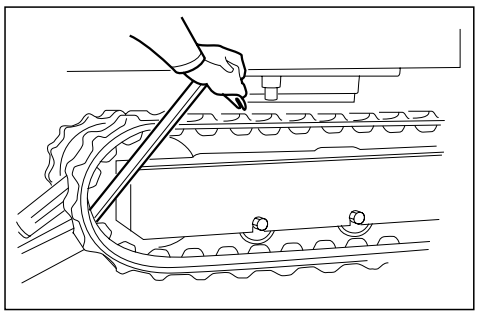


2. Crawler

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): 148 kg (74×2)
   327 lb (163.5×2)



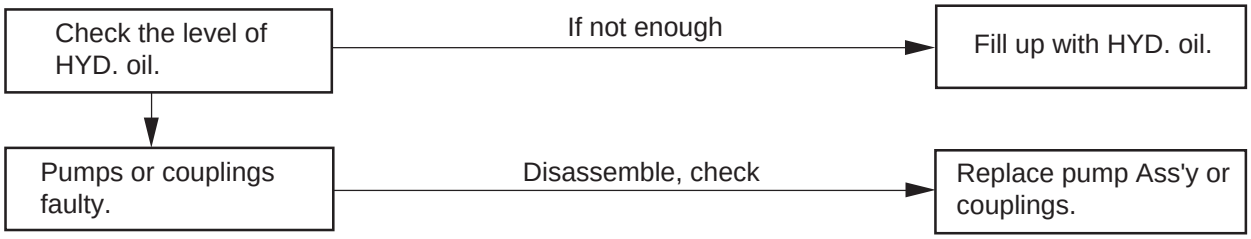
3) As rubber crawler is endless and of solid material, push the idler to the end and remove the rubber crawler by using steel bar from the idler.
   Weight (rubber crawler): 102 kg (51×2)
   225 lb (112.5×2)

16 SPROCKET

CONTENTS

19-1 Troubleshooting

19-1-1 All functions not operational



19-1-2 Operation power is weak