Komatsu PC138-8 Sample File.

This single sample file contains samples for

10533 Komatsu PC138-8 operations and maintenance - 375 pages
10533 Komatsu PC138-8 workshop manual - 946 pages

TEN00189-01

Operation & Maintenance Manual

HYDRAULIC
EXCAVATOR

GALEO

PC138US -8
PC138USLC-8

SERIAL NUMBERS PC138US- 20001
PC138USLC- 20001
and up

ecot3

NOTICE

Komatsu has Operation & Maintenance Manuals written in some other languages. if a foreign language manual is necessary, contact your local distributor for availability.

⚠ WARNING

Unsafe Use of this machine may cause serious injury or Death.Operators and maintenance personnel must read this manual before operating or maintaining this machine. This manual should be kept near the machine for reference and periodically reviewed by all personnel who will come into contact with it.

KOMATSU

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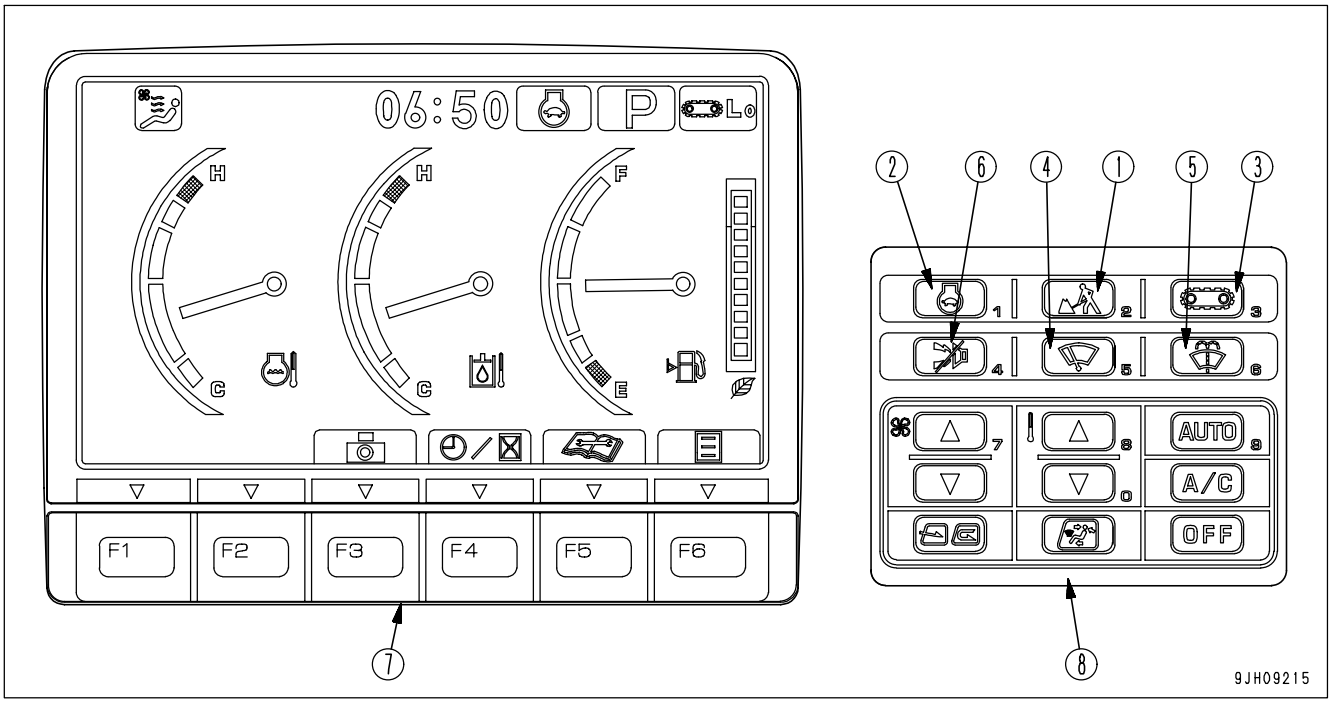
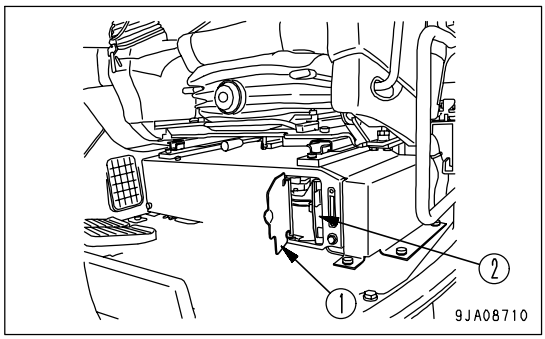
Monitor Switches Portion



(1) Working mode selector switch
(2) Auto-deceleration switch
(3) Travel speed selector switch
(4) Wiper switch
(5) Window washer switch
(6) Buzzer cancel switch
(7) Function switches
(8) Air conditioner switch

Cleaning Recirculated Air Filter

1. Open cover (1) at the front bottom left of the operator's seat.
2. Take out internal filter (2).
3. Clean internal filter (2) with compressed air. If there is oil stuck to the filter (2) or it is extremely dirty, wash it in a neutral agent. After washing, dry it thoroughly before using it again.



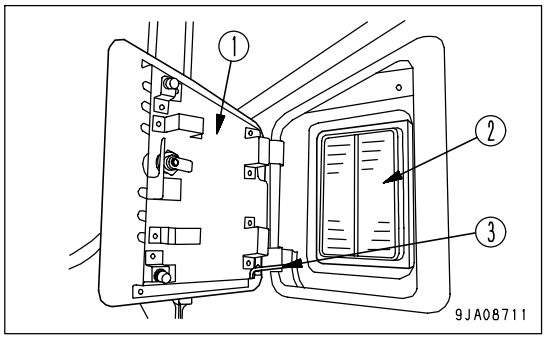
REMARK

If the clogging of the filter cannot be removed by blowing it with compressed air or washing in water, replace the filter with a new one.

4. After cleaning filter (2), return it to its original position and close cover (1).

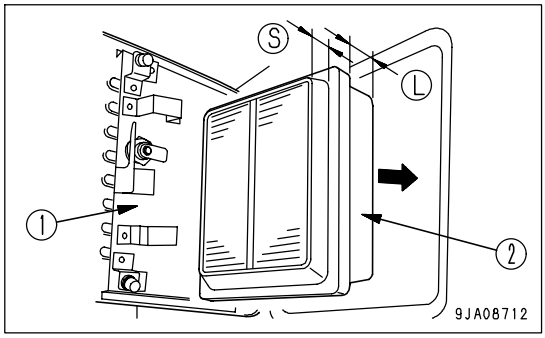
Cleaning Fresh Air Filter

1. Use the starting key to unlock cover (1) at the rear left of the operator's cab, open cover (1) by hand, secure it in position with cover support lever (3), then remove filter (2) from the inside.
2. Clean the filter with compressed air. If there is oil on the filter, or if the filter is extremely dirty, wash it in a neutral agent. After rinsing it in water, dry it thoroughly before using it again.
   Replace the filter with a new part every year. If the clogging of the filter cannot be removed by blowing with air or washing in water, replace the filter immediately.
3. After cleaning, return filter (2) to its original place, remove cover support lever (3), and close the cover. When doing this, lock it with the starting key. After locking it, do not forget to remove the starting key.

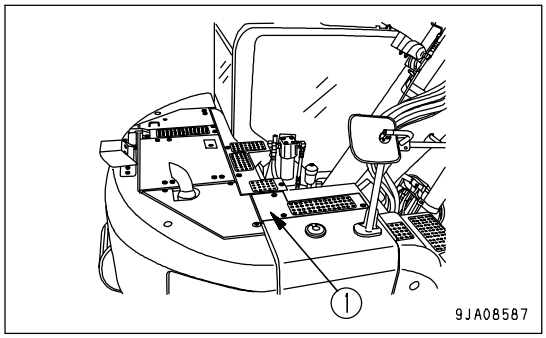


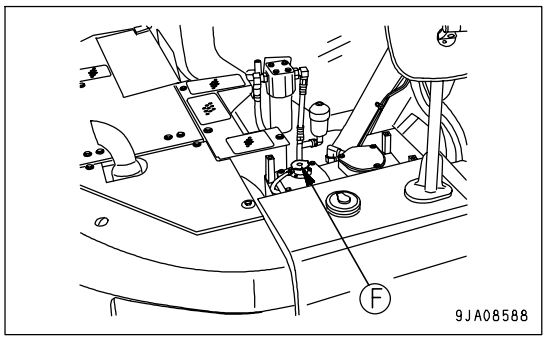
REMARK

The FRESH filter must be installed facing in the correct direction. When installing, insert the long (L) end of filter (2) into the filter case first. If the short (S) end is installed first, cover (1) will not close.



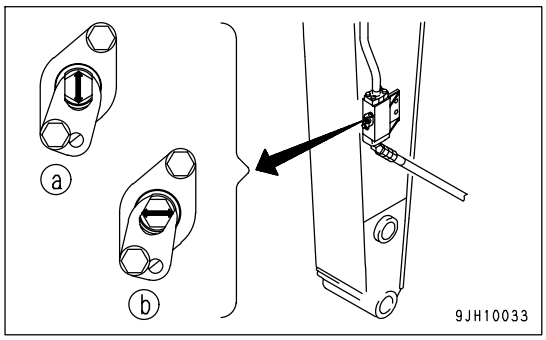
6. Remove cover (1) at the top surface of the hydraulic tank, then slowly loosen oil filler cap (F) to release the internal pressure.



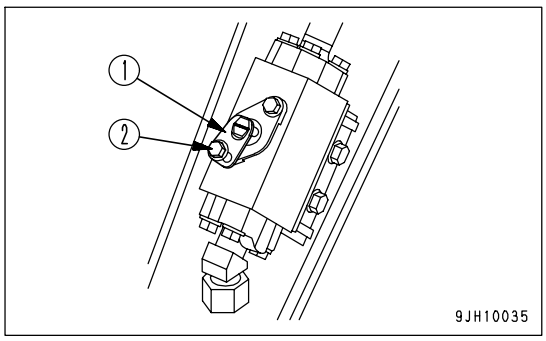


7. After checking that the oil temperature is low, remove the covers from the inlet port and outlet port (2 places).
   Be careful that no dirt or mud is stuck to the hose mouthpiece.
   If the O-ring is damaged, replace it with a new part.
8. Connect the hose at the attachment side.
   When doing this, check the direction of flow of the oil and be careful not to make any mistake.
9. Set the rotor of the stop valve installed to the inlet port on the side face of the arm and the outlet port piping to FREE position (a).

   (a) FREE: Hydraulic oil flows (direction of arrow is parallel to long direction of arm)
   (b) LOCK: Hydraulic oil does not flow (direction of arrow is at right angles to long direction of arm)



   • When setting the FREE or LOCK position of the stop valve rotor, remove bolt (2), turn over plate (1), then turn the rotor. After setting, install plate (1) again with bolt (2).



10. After installing the attachment, check the oil level in the hydraulic tank.

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SEN01968-02

Shop Manual

HYDRAULIC
EXCAVATOR

GALEO

PC138US -8
PC138USLC -8

SERIAL NUMBERS PC138US- 20001
PC138USLC- 20001 and up

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KOMATSU

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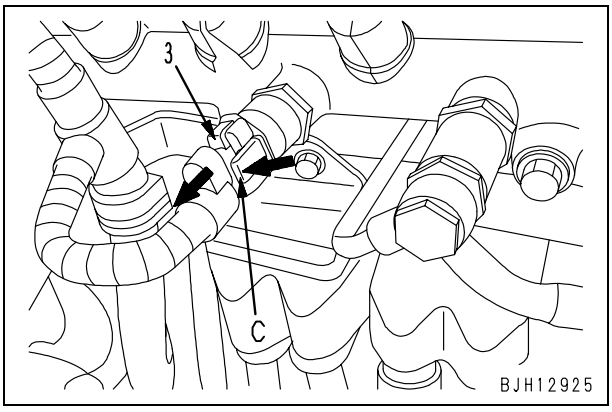
3. Push lock type

- 107, 114 engines
  Example)
  Fuel pressure sensor in common rail
  (**BOSCH-03**)

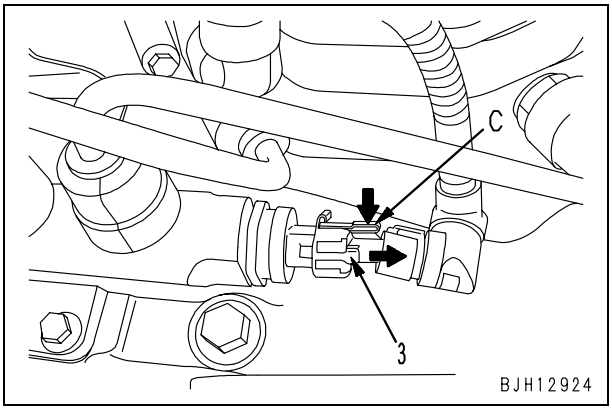
Disconnect connector (3) according to the following procedure.

1) While pressing lock (C), pull out connector (3) in the direction of the arrow.

- 114 engine

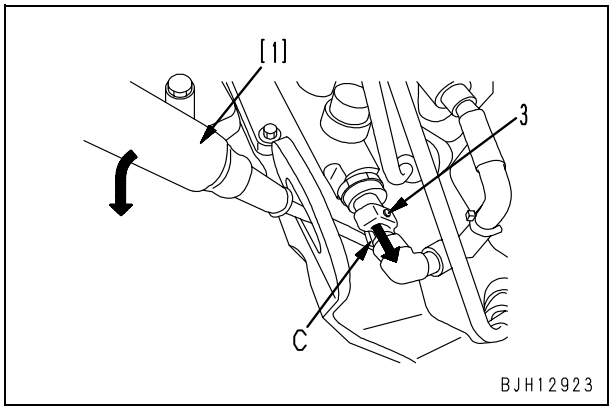


- 107 engine



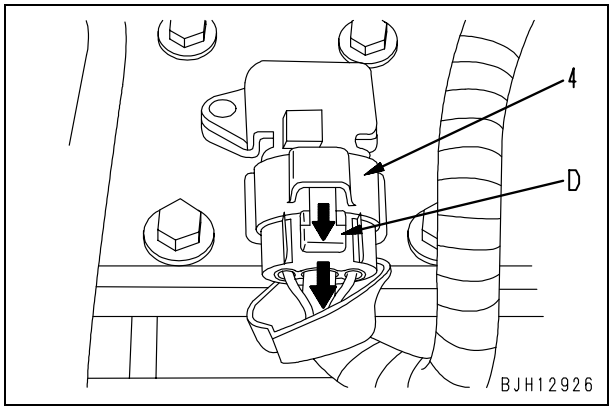
★ If the lock is on the underside, use flat-head screwdriver [1] since you cannot insert your fingers.

2) While pressing up lock (C) of the connector with flat-head screwdriver [1], pull out connector (3) in the direction of the arrow.

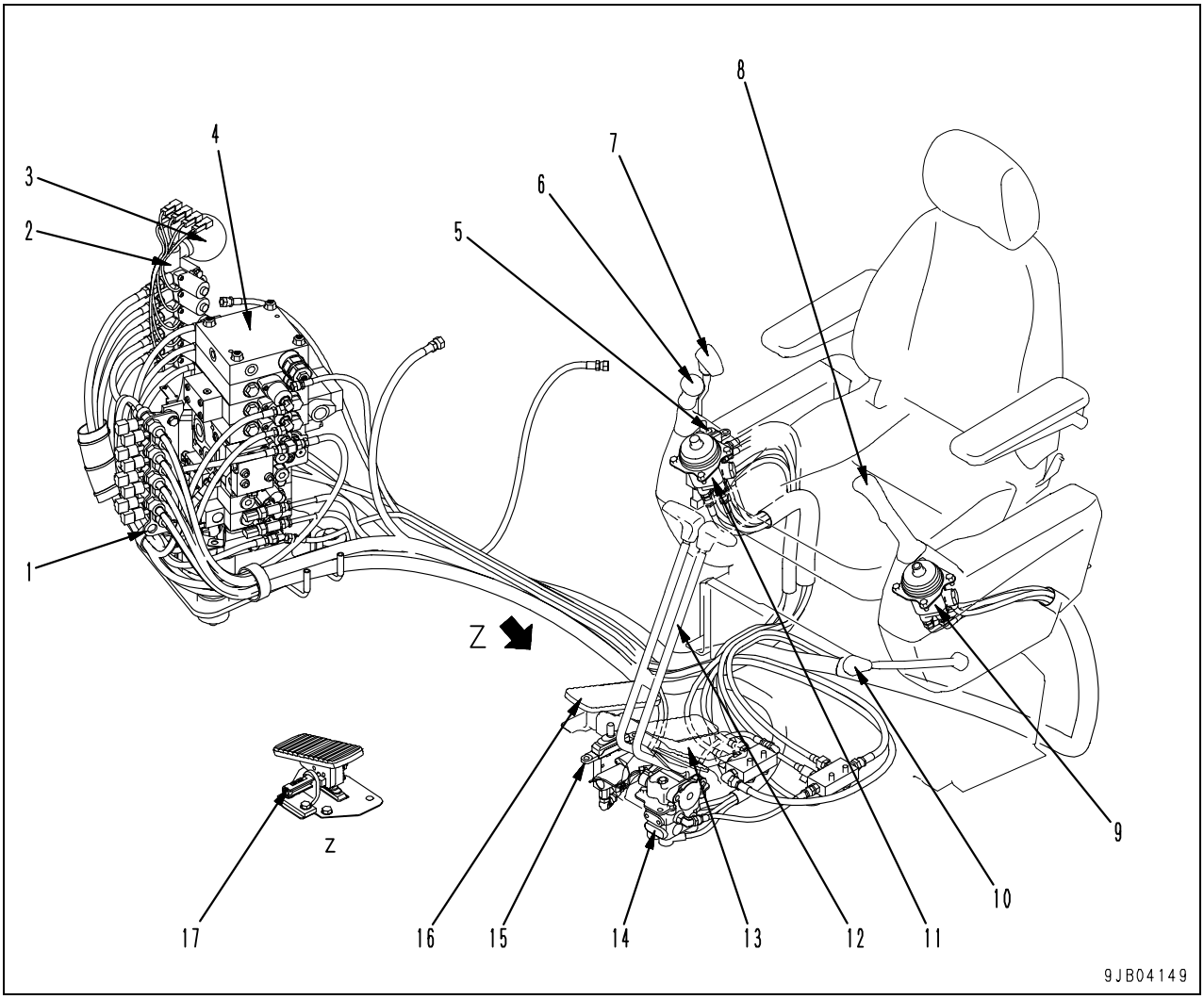


- 107, 114 engine
  Example)
  Intake air pressure/temperature sensor in intake manifold
  (**SUMITOMO-04**)

3) While pressing lock (D), pull out connector (4) in the direction of the arrow.

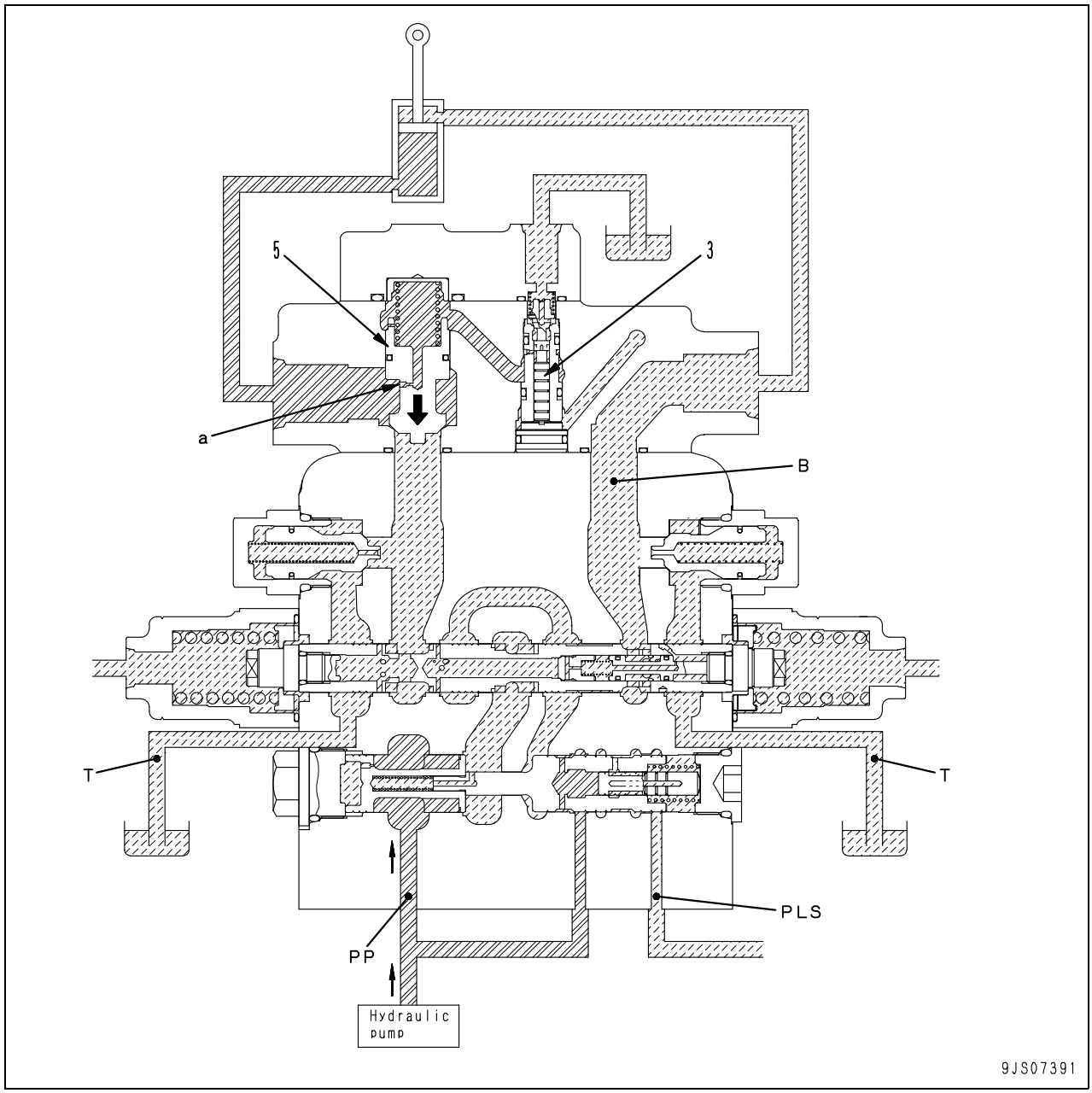


Valve control



1. Connecting valve
2. Solenoid valve
3. Accumulator (for PPC circuit)
4. Control valve
5. Blade PPC valve (blade specification)
6. R.H. work equipment control lever (for boom and bucket control)
7. Blade control lever (blade specification)
8. L.H. work equipment control lever (for arm and swing control)
9. L.H. work equipment PPC valve
10. Lock lever
11. R.H. work equipment PPC valve
12. Travel lever
13. Travel pedal
14. Travel PPC valve
15. Attachment PPC valve (Machine ready for attachment)
16. Attachment control pedal (Machine ready for attachment)
17. Lock pin

2. When boom and arm are set in neutral



Operation

- If the control lever is returned to the neutral position while the boom is raised out, the holding pressure in the boom cylinder bottom and arm cylinder head is blocked by poppet (5) and the pressurized oil flowing in through orifice (a) is blocked by pilot spool (3). Accordingly, the boom is held.

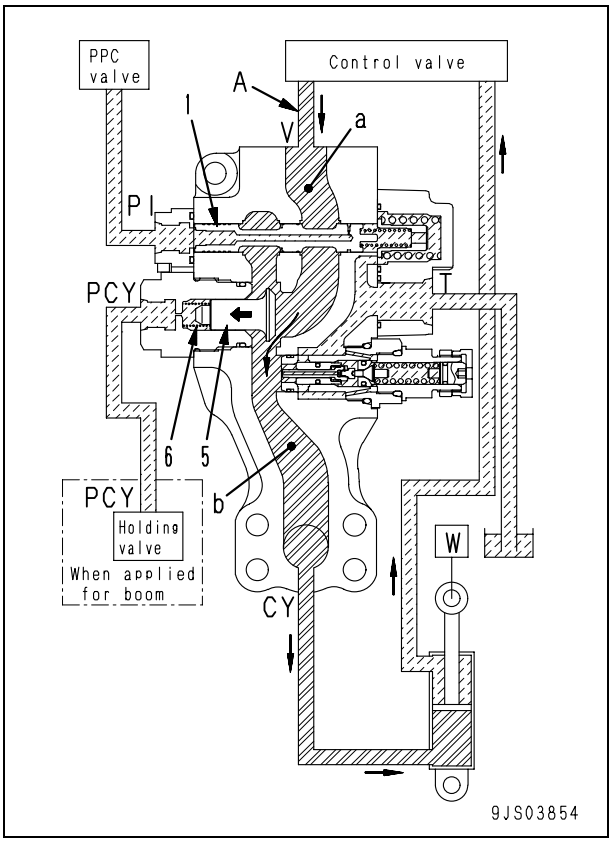
2. When pressurized oil flows from the main valve to the cylinder

When the piping is free of breakage

- Pressurized oil led to chamber (a) from the control valve becomes higher than the combined force of pressure from work equipment cylinder circuit chamber (b) and spring (6).
- Check valve (5) opens and chambers (a) and (b) are interconnected.
- Pressurized oil flows from the control valve to the work equipment cylinder.

If the piping is bursted

- If piping (A) between the control valve and the work equipment cylinder is broken, pressurized oil in chamber (a) flows outside from the damaged portion.
- Pressure force in chamber (a) drops.
- Pressure force in chamber (a) drops lower than the combined pressure force of chamber (b) and spring (6).
- Check valve (5) closes and chambers (a) and (b) are cut off.
- Pressure for the work equipment cylinder is held to prevent a sudden drop of the work equipment.



Removal and installation of of track shoe assembly

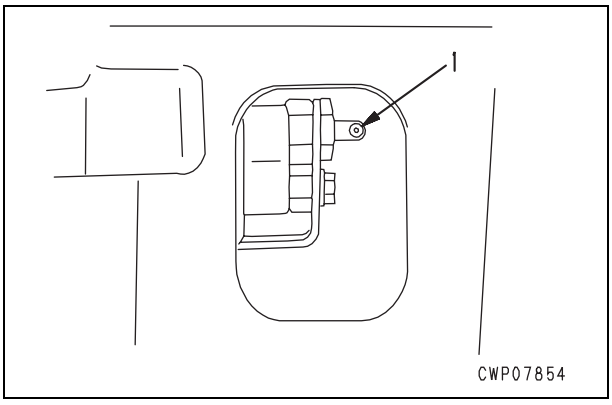
Special tools

Symbol	Part No.	Part name	Necessity	Q'ty	New/Remodel
R	791-616-1110	Frame	■	1	
	791-616-1121	Plate	■	1	
	791-616-1131	Plate	■	1	
	791-616-1150	Guide	■	1	
	791-616-1160	Adapter	■	1	
	791T-616-1280	Adapter	■	1	
	791-620-3530	Push	■	1	
	791-620-3260	Push	■	1	
	791-620-3270	Guide	■	1	
	01011-62260	Bolt	■	2	
	01643-62260	Washer	■	2	
	01011-61455	Bolt	■	3	
	01643-31445	Washer	■	3	
	790-105-1100	Cylinder (297 kN {30 ton})	■	1	
	790-101-1102	Pump	■	1	

Removal

1. Lower work equipment to ground, then loosen lubricator (1), and relieve track tension. [*1]

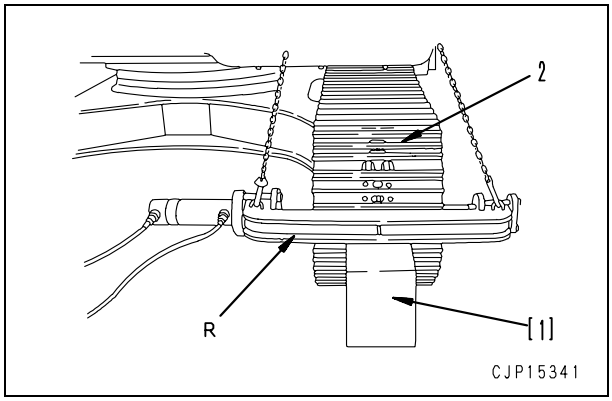
   ⚠ **The adjustment cylinder is under extremely high pressure. Never loosen the lubricator more than one turn. If the grease does not come out, move the machine backwards and forwards.**



2. Move machine forward so that position of master pin is at front of idler, and set block [1] in position.

3. Using tool **R**, pull out master pin. [*2]

4. Remove tool **R**, pull out temporary pin, and remove dust seal, then drive machine in reverse to lay out track (2). [*3]



Removal and installation of pump controller assembly

Removal

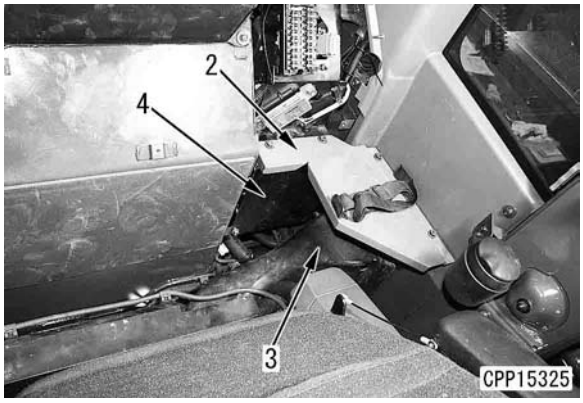
⚠ Disconnect the negative (–) terminal of the battery beforehand.

1. Remove cover (1).

2. Remove cover (2).

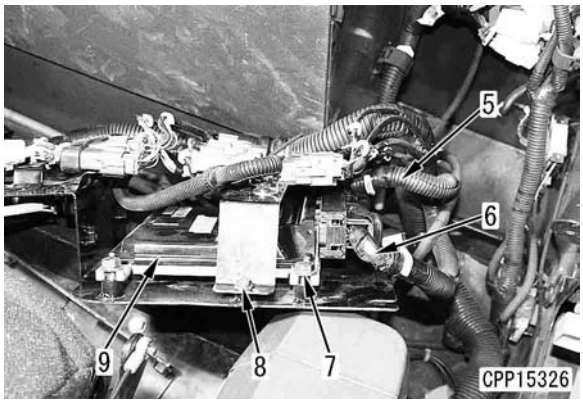
3. Remove duct (3).

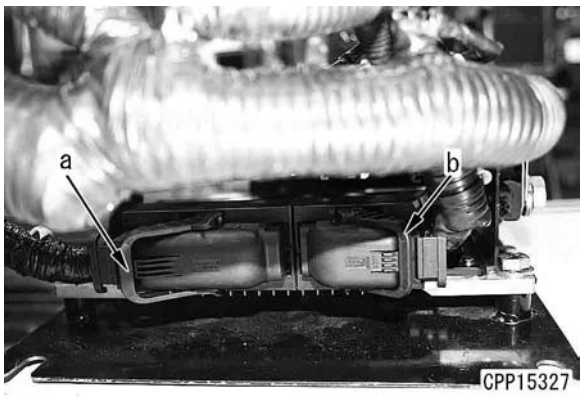
4. Remove cover (4).



5. Disconnect wiring (5) and (6).
   ★ Pull each connector lever (a) and (b) inward.

6. Remove 4 mounting bolts (7) and 2 mounting bolts (8), and remove pump controller assembly (9).





Installation

- Carry out the installation in the reverse order of removal.