WSM

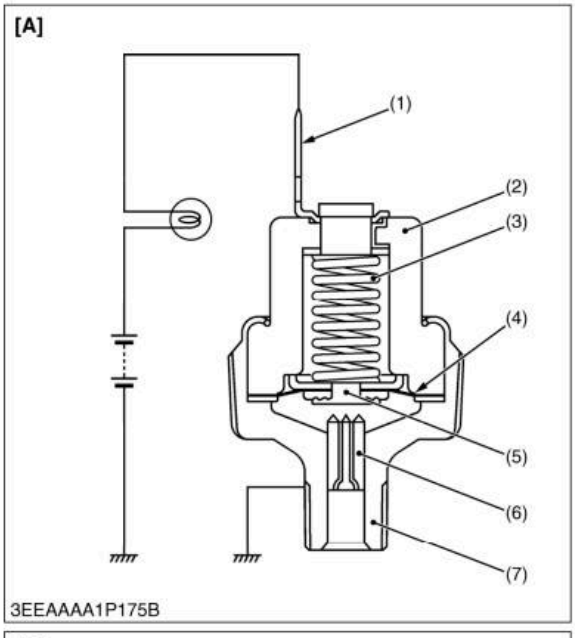
WORKSHOP MANUAL

ZD1011-AU

Kubota

KiSC issued 10, 2019 A

[7] OIL PRESSURE SWITCH



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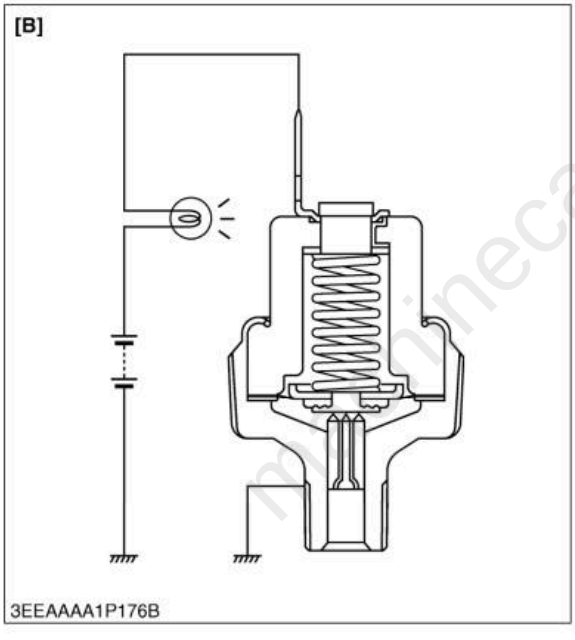

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Oil Pressure Switch Function

The oil pressure switch is mounted on the cylinder block and is led to the lubricating oil passage. When the oil pressure falls below the specified value, the oil pressure-warning lamp lights.

[A] At the proper oil pressure

When the engine is started and as the proper oil pressure builds, the diaphragm (4) is pushed up.

This separates the contact rivet (5) and breaks the circuit, causing the lamp to go out.

[B] At lower oil pressure

If the oil pressure drops, the resulting deflection of the diaphragm (4) will close the contact rivet (5) and again complete the circuit. The lighted lamp warns that the pressure of the lubricating system has dropped below the pressure setting.

[B] At lower oil pressure

49 kPa (0.50 kgf/cm^2, 7.1 psi) or less

The lighted lamp warns that the pressure of the lubricating system has dropped below the pressure setting.

(1) Terminal
(2) Insulator
(3) Spring
(4) Diaphragm
(5) Contact Rivet
(6) Contact
(7) Oil Switch Body

[A] At Proper Oil Pressure
[B] At Lower Oil Pressure

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[4] PISTON AND CONNECTING ROD

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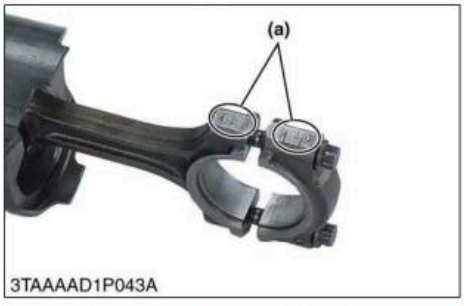

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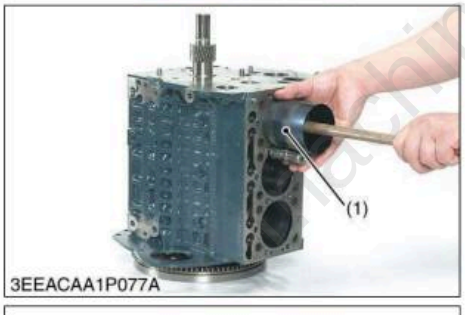

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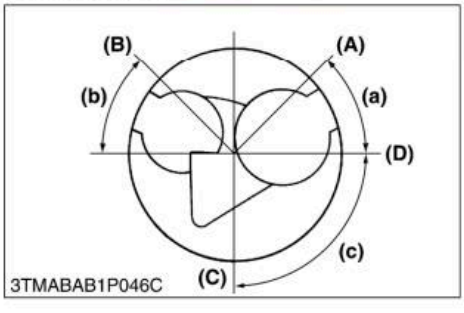

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Removing Connecting Rod

1. Remove the connecting rod cap (1).

(When reassembling)

- Align the marks **(a)** with each other. (Face the marks toward the injection pump.)
- Apply engine oil to the connecting rod screws and lightly screw it in by hand, then tighten it to the specified torque.
  If the connecting rod screw won't be screwed in smoothly, clean the threads.
  If the connecting rod screw is still hard to screw in, replace it.

Tightening torque	Connecting rod screw	27 to 30 N·m 2.7 to 3.1 kgf·m 20 to 22 lbf·ft

(1) Connecting Rod Cap **(a) Mark**

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Removing Piston

1. Turn the flywheel and bring the piston to top dead center.
2. Draw out the piston upward by lightly tapping it from the bottom of the crankcase with the grip of a hammer.
3. Draw out the other piston in the same method as above.

(When reassembling)

- Before inserting the piston into the cylinder, apply enough engine oil to the piston.
- When inserting the piston into the cylinder, face the mark on the connecting rod to the injection pump.

■ **IMPORTANT**

- **Do not change the combination of cylinder and piston. Make sure of the position of each piston by marking. For example, mark "1" on the No.1 piston.**
- **When installing the piston into the cylinder, place the gaps of all the piston rings as shown in the figure.**
- **Carefully insert the pistons using a piston ring compressor (1). Otherwise, their chrome-plated section may be scratched, causing trouble inside the cylinder.**

Models	Mark
D782-E4B	B

(1) Piston Ring Compressor

(A) Top Ring Gap
(B) Second Ring Gap
(C) Oil Ring Gap
(D) Piston Pin Hole

(a) 0.79 rad (45°)
(b) 0.79 rad (45°)
(c) 1.57 rad (90°)

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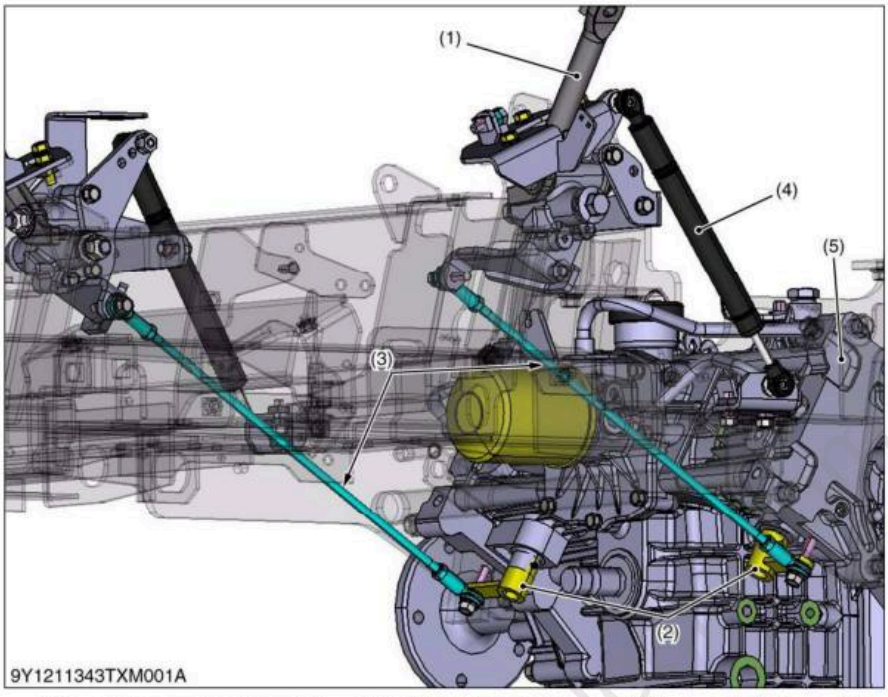
(7) Hydrostatic Control Linkage

Hydrostatic Control Linkage Function



(1) Motion Control Lever
(2) Trunnion Arm
(3) Speed Control Rod
(4) Damper
(5) HST

The motion control lever (1) and the trunnion shaft of variable swashplate are linked with the speed control rod (3) and the trunnion arm (2). As the motion control lever (1) is pushed, the swashplate rotates and forward travelling speed increases. Pulling the motion control lever (1) increases reverse speed.

A Neutral position can be reached by placing the motion control levers (1) into the neutral lock position.The damper connected to the speed shaft restricts the movement of the linkage to prevent abrupt operation or reversing.

As the motion control levers (1) are moved to a full left turn position, the right hydraulic pump is moved to the full-speed forward position and the left pump is moved to the full-speed reverse position. This will allow the machine to pivot around its center.

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4. STARTING SYSTEM

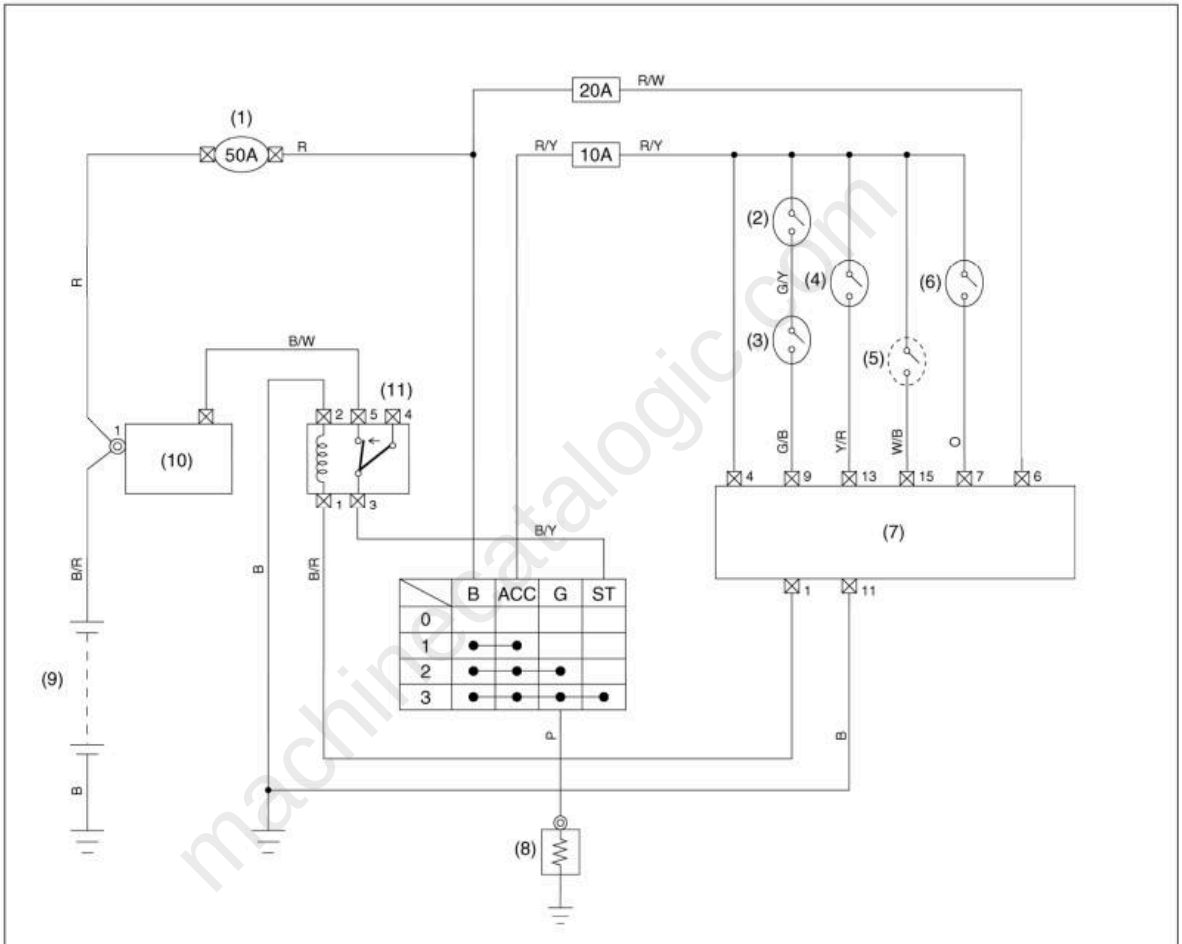
[1] STARTING SYSTEM CIRCUIT

When the main switch is turned to the **PREHEAT** position, the terminal **B** is connected to the terminals **G** and **ACC**. The glow plugs become red-hot, and the preheat indicator lamp also lights on while preheating.

When the main switch is then turned to the **START** position with the safety switches on, the terminal **B** is connected to the terminals **ST** and **ACC**. Consequently, battery current flows to the starter motor and start the engine.

The main switch automatically returns to the **ON** position, the terminal **B** is connected only to the terminal **ACC**, thereby causing the starting circuit to be opened, stopping the starter motor.

When the main switch turned from the **ON** position to the **OFF** position, the fuel cut-off solenoid moves the fuel injection pump control rack to the **"No Fuel Injection"** position and stop the engine.



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(1) Slow Blow Fuse
(2) Neutral (R)
(3) Neutral (L)
(4) Seat
(5) Parking Brake
(6) PTO
(7) OPC
(8) Glow Plug
(9) Battery
(10) Starter
(11) Starter Relay

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Full Version Available

Kubota ZD1011-AU Zero Turn Mower Workshop Manual

This is a short preview. The complete manual contains all chapters, wiring diagrams, torque specifications and full service procedures.