

# WSM

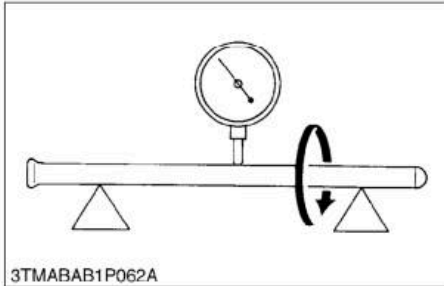
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WORKSHOP MANUAL  
TRACTOR, ROTARY MOWER,  
FRONT LOADER

BX1850, BX2350, RCK48-18BX,  
RCK54-23BX, RCK60B-23BX,  
RCK48P-18BX, RCK54P-23BX,  
LA203, LA243

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**Kubota**

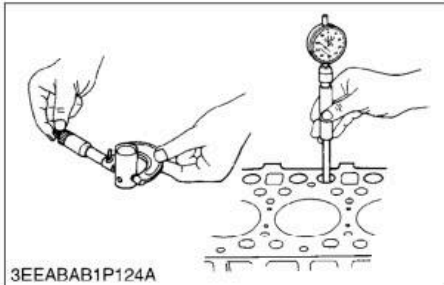


**Push Rod Alignment**

1. Place the push rod on V blocks.
2. Measure the push rod alignment.
3. If the measurement exceeds the allowable limit, replace the push rod.

Push rod alignment	Allowable limit	0.25 mm 0.0098 in.
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**Oil Clearance between Tappet and Tappet Guide Bore**

1. Measure the tappet O.D. with an outside micrometer.
2. Measure the I.D. of the tappet guide bore with a cylinder gauge, and calculate the oil clearance.
3. If the oil clearance exceeds the allowable limit or the tappet is damaged, replace the tappet.

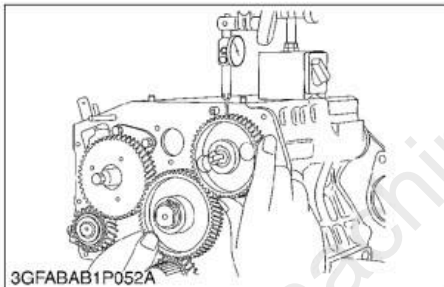
Oil clearance between tappet and tappet guide bore	Factory spec.	0.016 to 0.052 mm 0.00063 to 0.00205 in.
	Allowable limit	0.10 mm 0.0039 in.

Tappet O.D.	Factory spec.	17.966 to 17.984 mm 0.70732 to 0.70803 in.
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Tappet guide bore I.D.	Factory spec.	18.000 to 18.018 mm 0.70866 to 0.70937 in.
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**(2) Timing Gears**



**Timing Gear Backlash**

1. Set a dial indicator (lever type) with its tip on the gear tooth.
2. Move the gear to measure the backlash, holding its mating gear.
3. If the backlash exceeds the allowable limit, check the oil clearance of the shaft and the gear.
4. If the oil clearance is not proper, replace the gear.

Backlash between idle gear and crank gear	Factory spec.	0.043 to 0.124 mm 0.00169 to 0.00488 in.
	Allowable limit	0.15 mm 0.0059 in.

Backlash between idle gear and cam gear	Factory spec.	0.047 to 0.123 mm 0.00185 to 0.00484 in.
	Allowable limit	0.15 mm 0.0059 in.

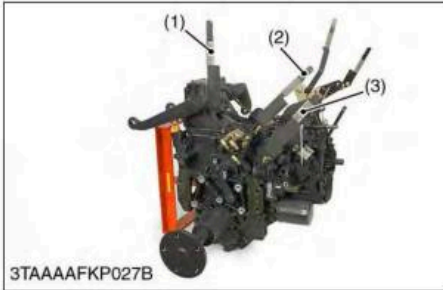
Backlash between idle gear and injection pump gear	Factory spec.	0.046 to 0.124 mm 0.00181 to 0.00488 in.
	Allowable limit	0.15 mm 0.0059 in.

Backlash between oil pump drive gear and crank gear	Factory spec.	0.041 to 0.123 mm 0.00161 to 0.00484 in.
	Allowable limit	0.15 mm 0.0059 in.

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### [3] DISASSEMBLING AND ASSEMBLING

#### (1) Hydrostatic Transmission



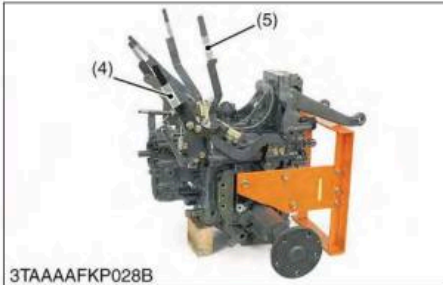
#### Levers and Mower Lift Arm

1. Tap out the spring pin from the range gear shift lever (1) and front wheel drive lever (3), then remove the both levers.
2. Remove the hydraulic control lever (2).
3. Remove the PTO select lever (4) and PTO clutch control lever (5).

#### (When reassembling)

- Apply grease to inside of the front coupling and rear mounting.

Tightening torque	Hydraulic control lever mounting bolt and nut	17.7 to 20.6 N·m 1.8 to 2.1 kgf·m 13.0 to 15.2 ft·lbs
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|-----------------------------|------------------------------|
| (1) Range Gear Shift Lever  | (4) PTO Select Lever         |
| (2) Hydraulic Control Lever | (5) PTO Clutch Control Lever |
| (3) Front Wheel Drive Lever |                              |

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#### PTO Clutch Valve

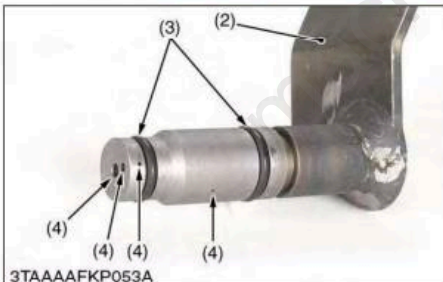
1. Remove the stopper (1).
2. Draw out the PTO clutch valve (2) from the transaxle assembly.

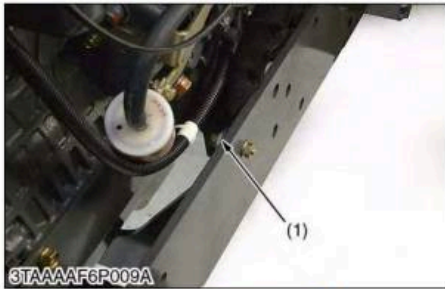
#### (When reassembling)

1. Clean the oil passages (4).
2. Apply the transmission fluid to the O-rings (3).

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|----------------------|-----------------|
| (1) Stopper          | (3) O-ring      |
| (2) PTO Clutch Valve | (4) Oil Passage |

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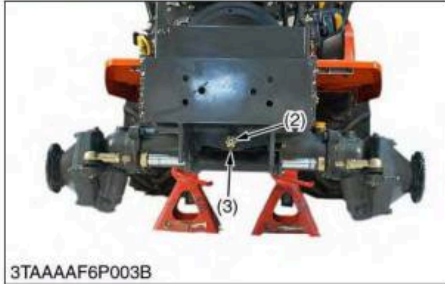


**Front Axle Assembly [BX2350]**

1. Remove the power steering hose clamp (1).
2. Place the garage jack under the front axle.
3. Remove the cotter pin (1).
4. Remove the slotted nut (2) of center pin and separate the front axle from the frame.
5. Disconnect the power steering cylinder hoses (4).

**(When reassembling)**

- After mounting the front axle assembly to the frame, be sure to adjust the front axle rocking force. (See page 3-S5.)
- Installing the cotter pin, be sure to split the cotter pin like an anchor



Tightening torque	Power steering cylinder hose	23.6 to 27.4 N-m 2.4 to 2.8 kgf-m 17.4 to 20.2 ft-lbs
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- (1) Hose Clamp  
(2) Cotter Pin

- (3) Slotted Nut (Adjusting Nut for Front Axle Rocking Force)  
(4) Power Steering Hose

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**7) Hazard Switch Continuity when Setting Switch Knob at "OFF" Position**

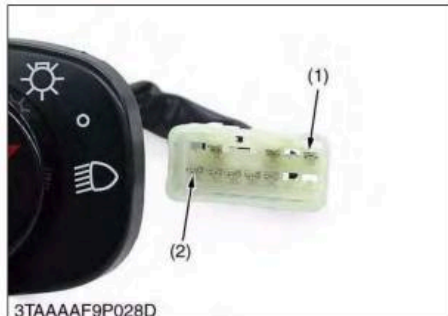
1. Set the hazard switch knob to the **OFF** position.
2. Measure the resistance with an ohmmeter across the black / blue lead (1) and blue / white lead (2).
3. If infinity is not indicated, the combination switch is faulty.

Resistance (Hazard switch at <b>OFF</b> position)	Black / Blue lead (1) - Blue / White lead (2)	Infinity
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- (1) Black / Blue Lead
- (2) Blue / White Lead

**A : Hazard Switch "OFF" Position**

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**8) Hazard Switch Knob at "ON" Position**

1. Set the hazard switch knob to the **ON** position.
2. Measure the resistance with an ohmmeter across the black / blue lead (1) and blue / white lead (2).
3. If 0 Ω is not indicated, the combination switch is faulty.

Resistance (Hazard switch at <b>ON</b> position)	Black / Blue lead (1) - Blue / White lead (2)	0 Ω
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- (1) Black / Blue Lead
- (2) Blue / White Lead

**A : Hazard Switch "ON" Position**

W1054637



# Full Version Available

Kubota LA203 Front Loader Workshop Manual

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

**VIEW THE FULL MANUAL**

<https://machinecatalogic.com/kubota-la203-front-loader-workshop-manual/>