

# WSM

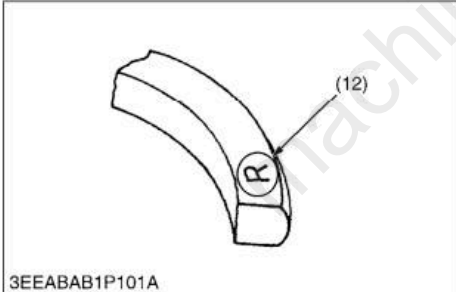
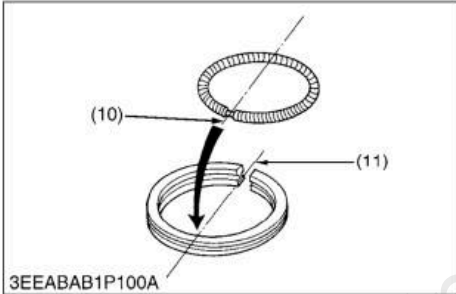
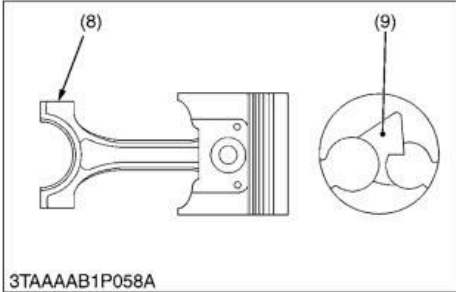
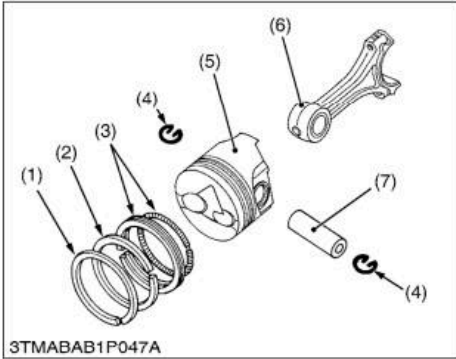
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WORKSHOP MANUAL  
TRACTOR,  
FRONT LOADER, BACKHOE

**BX25DLB-AU,  
LA240A AU-SG, BT602**

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**Kubota**



**Piston Ring and Connecting Rod**

1. Remove the piston rings using a piston ring tool.
2. Remove the piston pin (7), and separate the connecting rod (6) from the piston (5).

**(When reassembling)**

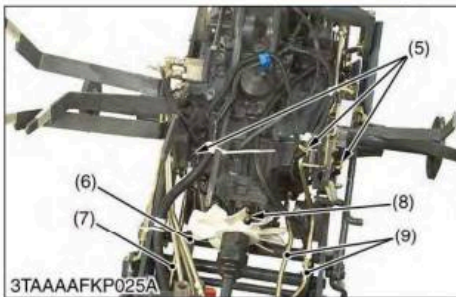
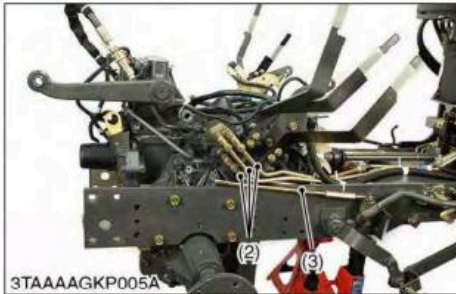
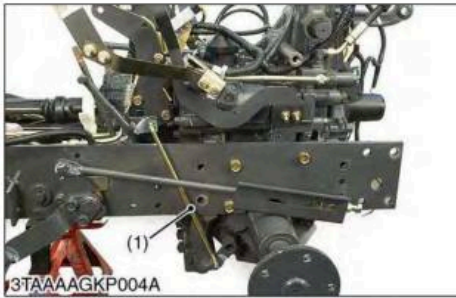
- Install the rings so that the manufacturer's mark (12) near the gap faces the top of the piston.
- When installing the oil ring onto the piston, set the expander joint (10) on the opposite side of the oil ring gap (11).
- Apply engine oil to the piston pin.
- When installing the connecting rod to the piston, immerse the piston in 80 °C (176 °F) oil for 10 to 15 minutes and insert the piston pin to the piston.
- When installing the connecting rod to the piston, align the mark (8) on the connecting rod to the fan-shaped concave (9).

**■ NOTE**

- **Mark the same number on the connecting rod and the piston so as not to change the combination.**

- |                          |                          |
|--------------------------|--------------------------|
| (1) Top Ring             | (7) Piston Pin           |
| (2) Second Ring          | (8) Mark                 |
| (3) Oil Ring             | (9) Fan-shaped Concave   |
| (4) Piston Pin Snap Ring | (10) Expander Joint      |
| (5) Piston               | (11) Oil Ring Gap        |
| (6) Connecting Rod       | (12) Manufacturer's Mark |

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**Transaxle Assembly**

1. Remove the differential lock rod (1) and disconnect the mower link (2).
2. Remove the brake rod (4).
3. Disconnect the pipes (3). (If equipped.)
4. Disconnect the connector (5).
5. Remove the rear coupling mounting bolt (8).
6. Disconnect the power steering pipes (9).
7. Remove the speed control rod (7).
8. Remove the wire harness clamps
9. Remove the frame brackets (10).

**(When reassembling)**

- Tighten the smaller bolt (M12) first.
- Before mounting the transaxle assembly on the tractor main frame, check the flatness of the frame brackets with a straight edge securely.

Tightening torque	Transaxle assembly mounting bolt (M12)	63 to 72 N·m 6.4 to 7.4 kgf·m 47 to 53 lbf·ft
	Transaxle assembly mounting bolt (M14)	124 to 147 N·m 12.6 to 15.0 kgf·m 91.2 to 108 lbf·ft
	Rear coupling mounting bolt (M8)	24 to 27 N·m 2.4 to 2.8 kgf·m 18 to 20 lbf·ft

**(Reference)**

- Speed control rod length (7):  
371 mm (14.6 in.)

- |                           |                                 |
|---------------------------|---------------------------------|
| (1) Differential Lock Rod | (6) Front Wheel Drive Shaft     |
| (2) Mower Link            | (7) Speed Control Rod           |
| (3) Pipe                  | (8) Rear Coupling Mounting Bolt |
| (4) Brake Rod             | (9) Power Steering Pipe         |
| (5) Connector             | (10) Frame Bracket              |

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## [4] SERVICING



3TAAAD6P023A

### Clearance between Differential Case and Differential Side Gear

1. Measure the differential side gear boss O.D..
2. Measure the differential case bore I.D., and calculate the clearance.
3. Measure the differential case cover bore I.D., and calculate the clearance.
4. If the clearance exceeds the allowable limit, replace damaged parts.

Clearance between differential case and differential side gear	Factory specification	0.040 to 0.082 mm 0.0016 to 0.0032 in.
	Allowable limit	0.17 mm 0.0067 in.

Differential case bore I.D.	Factory specification	26.000 to 26.021 mm 1.0237 to 1.0244 in.
Differential side gear O.D.	Factory specification	25.939 to 25.960 mm 1.0213 to 1.0220 in.

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### Clearance between Differential Pinion Shaft and Differential Pinion

1. Measure the differential pinion shaft O.D..
2. Measure the differential pinion I.D., and calculate the clearance.
3. If the clearance exceeds the allowable limit, replace damaged parts.

Clearance between differential pinion shaft and differential pinion	Factory specification	0.025 to 0.055 mm 0.00099 to 0.0021 in.
	Allowable limit	0.25 mm 0.0098 in.

Differential pinion shaft O.D.	Factory specification	9.960 to 9.975 mm 0.3922 to 0.3927 in.
Differential pinion I.D.	Factory specification	10.000 to 10.015 mm 0.39370 to 0.39429 in.

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### Backlash between Differential Pinion and Differential Side Gear

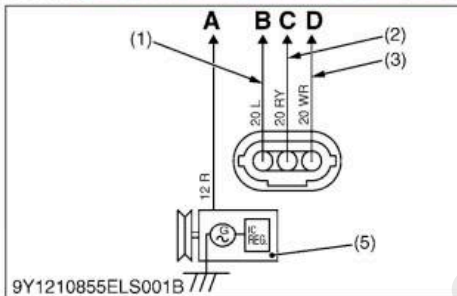
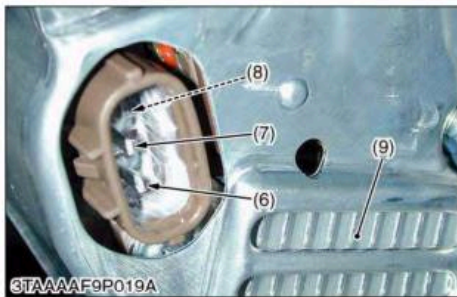
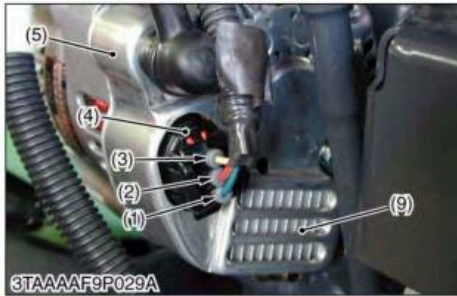
1. Set a dial gauge (lever type) on a tooth of the differential pinion.
2. Fix the differential side gear, and move the differential pinion to measure the backlash.
3. If the measurement exceeds the factory specifications, adjust with the differential side gears shims.

Backlash between differential pinion and differential side gear	Factory specification	0.1 to 0.3 mm 0.004 to 0.01 in.
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### (Reference)

- Thickness of adjusting shims:
  - For side gear:
    - 0.80 mm (0.031 in.)
    - 1.0 mm (0.039 in.)
    - 1.2 mm (0.047 in.)
  - For pinion:
    - 3.30 mm (0.130 in.)
    - 3.50 mm (0.138 in.)
    - 3.70 mm (0.146 in.)
    - 3.90 mm (0.154 in.)

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**Hour Meter and Tachometer**

1. Disconnect the **3P** connector (4) from the IC regulator (9) located in the alternator (5) after starting the engine.
2. Measure the voltage with a voltmeter across the hour meter terminal (6) and the alternator body when the hour meter or tachometer does not indicated the proper value.
3. If the measured voltages differ from the specified voltage, the hour meter and tachometer is damaged.

Voltage while engine operates at idling speeds	Hour meter terminal – Alternator body	Approx. battery voltage
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- (1) L (Blue) Load
  - (2) RY (Red / Yellow) Lead
  - (3) WR (White / Red) Lead
  - (4) **3P** Connector
  - (5) Alternator
  - (6) Hour Meter and Tachometer Terminal
  - (7) Ground Terminal
  - (8) Charge Lamp Terminal
  - (9) IC Regulator
- A: To the Battery**
  - B: To Hour Meter and Tachometer**
  - C: To Main Switch**
  - D: To Charge Indicator**

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# Full Version Available

Kubota BT602 Backhoe 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-bt602-backhoe-workshop-manual/)

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