

# WSM

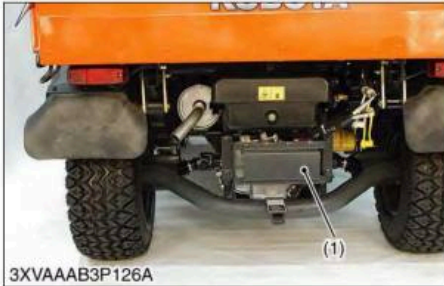
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WORKSHOP MANUAL  
UTILITY VEHICLE

**RTV900**

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**Kubota**



### Rear Guard and Oil Filter Bracket

1. Remove the rear guard (1).
2. Remove the filter bracket (2) with oil filter cartridge and suction hoses.

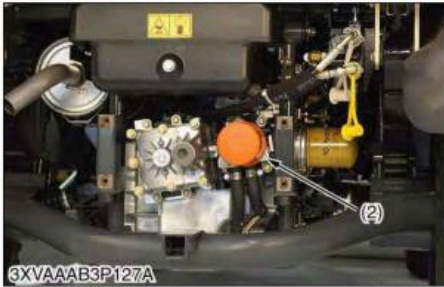
#### (When reassembling)

Tightening torque	Oil filter bracket mounting screw	18.0 to 21.0 N·m 1.8 to 2.1 kgf·m 13.3 to 15.5 lbf·ft
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(1) Rear Guard

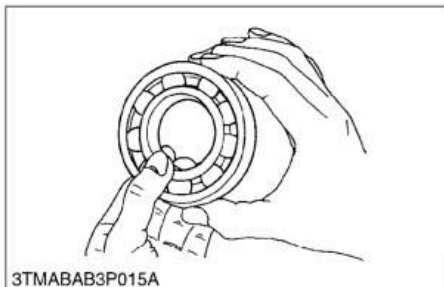
(2) Oil Filter Bracket

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### [3] SERVICING



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#### Checking Bearing

1. Hold the inner race, and push and pull the outer race in all directions to check for wear and roughness.
2. Apply transmission fluid to the bearing, and hold the inner race. Then, turn the outer race to check rotation.
3. If there is any defect, replace it.

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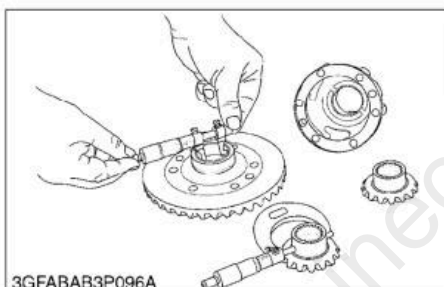
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#### Backlash between Differential Pinion and Differential Side Gear

1. Secure the differential case with a vise.
2. Put the solder (0.5 mm (0.020 in.) thickness) on the tooth of the differential pinion.
3. Temporarily install the drive shaft assembly and rotate the drive shaft carefully to measure the backlash.
4. If the measurement exceeds the factory specifications, adjust with the differential side gears shims.

Backlash between differential pinion and differential side gear	Factory spec.	0.1 to 0.3 mm 0.004 to 0.012 in.
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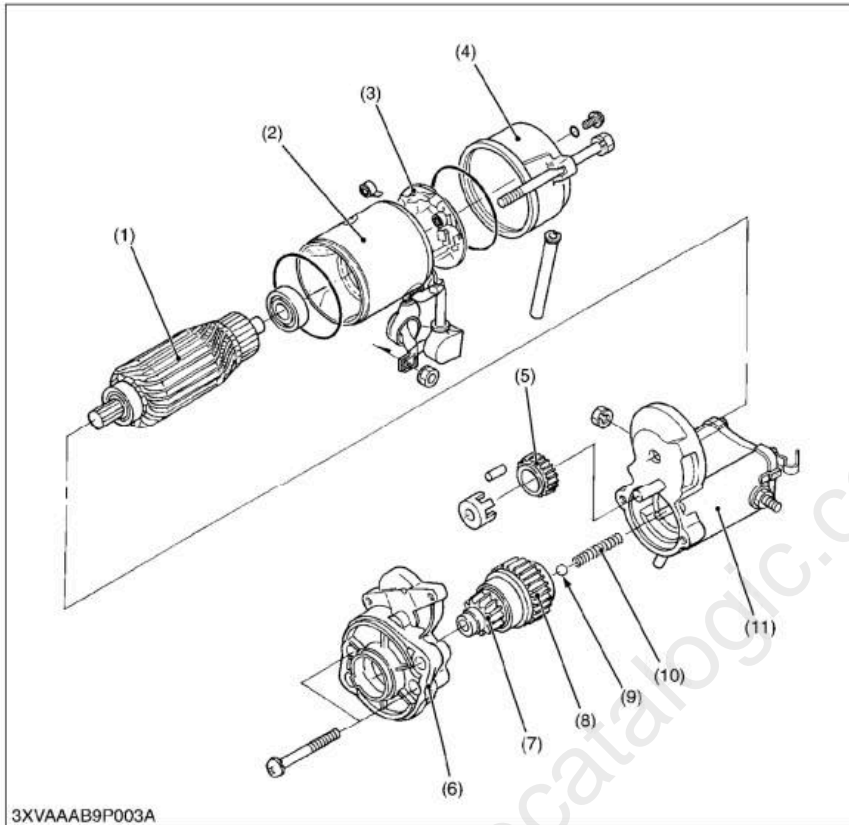
#### Clearance between Differential Case (Spiral Bevel Gear) and Differential Side Gear

1. Measure the differential side gear boss O.D. with an outside micrometer.
2. Measure the differential case I.D. and the spiral bevel gear I.D. with an inside micrometer, and calculate the clearance.
3. If the clearance exceeds the allowable limit, replace faulty parts.

Clearance between differential case (spiral bevel gear) and differential side gear	Factory spec.	0.025 to 0.066 mm 0.00098 to 0.00260 in.
	Allowable limit	0.3 mm 0.012 in.

Differential case I.D.	Factory spec.	32.000 to 32.025 mm 1.25984 to 1.26082 in.
Spiral bevel gear I.D.	Factory spec.	32.000 to 32.025 mm 1.25984 to 1.26082 in.
Differential side gear O.D.	Factory spec.	31.959 to 31.975 mm 1.25823 to 1.25886 in.

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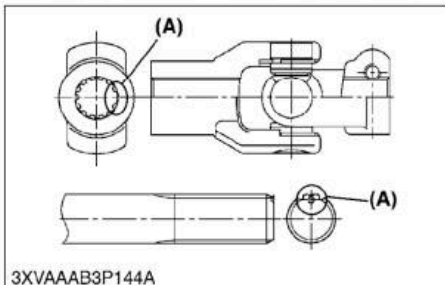
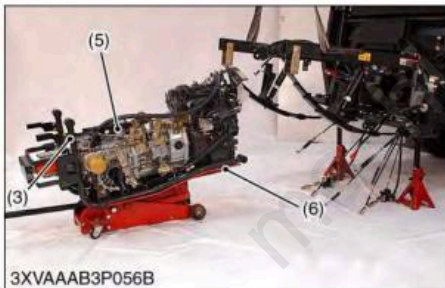
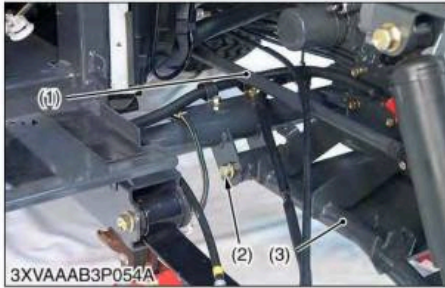
**[1] STARTER**

- (1) Armature
- (2) Yoke
- (3) Brush Holder
- (4) End Frame
- (5) Gear
- (6) Drive End Frame
- (7) Pinion
- (8) Roller Clutch
- (9) Ball
- (10) Spring
- (11) Magnet Switch

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The starter motor is a reduction type. The speed of the pinion gear is reduced to approximately one third of motor one.



### Dismounting Transmission and Engine One Piece Assembly

1. Remove the universal joint mounting screw and disconnect the universal joint (4) from transmission.
2. Set the power train support (5) and remove the mission frame (3) mounting bolt (2) and nut.
3. Lift up the main frame by hoist.
4. Remove the transmission and engine one piece assembly (4).

#### (When reassembling)

- Align the master spline (A) of 4WD propeller shaft and universal joint.
- The bolt can be put through the rubber bushing more easily if soap water is applied to the bolt. Never hit the bolt.
- Assemble the mission frame in such a manner as to insert two bolts in the front and then two bolts in the rear, instead of inserting the four bolts at a time.
- When reassembling the transmission and engine one piece assembly (mission frame) into the main frame, do not forget to assemble the 4WD propeller shaft (1) with universal joint (4) as well.
- Apply grease to splines of 4WD propeller shaft (1) and splines of universal joint (4).

Tightening torque	Mission frame mounting bolt and nut	29.4 to 49.0 N·m 3.0 to 5.0 kgf·m 21.7 to 36.1 lbf·ft
	Universal joint mounting screw	23.6 to 27.4 N·m 2.4 to 2.8 kgf·m 17.4 to 20.2 lbf·ft

- (1) 4WD Propeller Shaft  
(2) Mission Frame Mounting Bolt  
(3) Mission Frame  
(4) Universal Joint

- (5) Transmission and Engine One Piece Assembly  
(6) Power Train Support

#### (A) Master Spline

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### Power Steering Hose and Radiator Hose (Lower)

Here after, refer to WSM No. 9Y021-15300 of RTV900, which serves as basis.

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# Full Version Available

Kubota RTV900 Utility Vehicle 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-rtv900-utility-vehicle-workshop-manual/>