

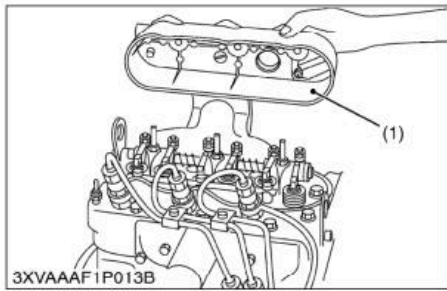
WSM

WORKSHOP MANUAL
UTILITY VEHICLE

RTV1140CPX

Кубота

(2) Cylinder Head and Valve



Cylinder Head Cover

1. Disconnect the breather hose.
2. Remove the head cover nut.
3. Remove the cylinder head cover (1).

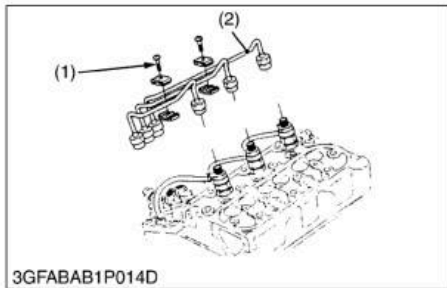
(When reassembling)

- Check to see if the cylinder head cover gasket is not defective.

Tightening torque	Cylinder head cover nut	7 to 8 N·m 0.7 to 0.9 kgf·m 5 to 6 lbf·ft
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(1) Cylinder Head Cover

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Injection Pipes

1. Loosen the screws to the pipe clamp (1).
2. Detach the injection pipes (2).

(When reassembling)

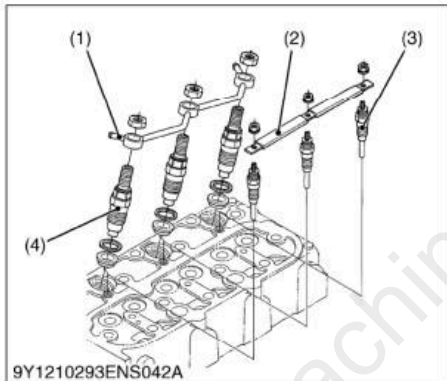
- By using compressed air, clean out the injector pipes (2). Then, reassemble the pipes in the reverse order.

Tightening torque	Injection pipe retaining nut	25 to 34 N·m 2.5 to 3.5 kgf·m 18 to 25 lbf·ft
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(1) Pipe Clamp

(2) Injection Pipe

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Nozzle Holder Assembly and Glow Plug

1. Remove the overflow pipe (1).
2. Remove the nozzle holder assemblies (4).
3. Remove the copper gasket (5) and heat seal (6).
4. Remove the lead (2) from the glow plugs (3).
5. Remove the glow plugs (3).

(When reassembling)

- Replace the copper gasket and heat seal with new one.

Tightening torque	Overflow pipe retaining nut	20 to 24 N·m 2.0 to 2.5 kgf·m 15 to 18 lbf·ft
	Nozzle holder assembly	49 to 68 N·m 5.0 to 7.0 kgf·m 37 to 50 lbf·ft
	Glow plug	7.9 to 14 N·m 0.80 to 1.5 kgf·m 5.8 to 10 lbf·ft

(1) Overflow Pipe

(2) Lead

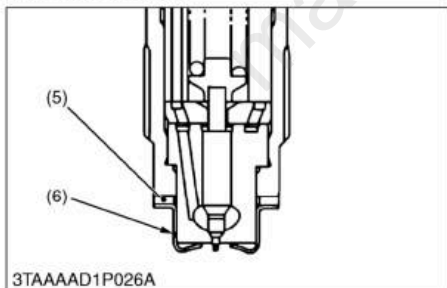
(3) Glow Plug

(4) Nozzle Holder Assembly

(5) Copper Gasket

(6) Heat Seal

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3. TIGHTENING TORQUES

Tightening torques of screws, bolts and nuts on the table below are especially specified.
(For general use screws, bolts and nuts: See page G-11.)

Item	N·m	kgf·m	lbf·ft
Drain plug	58 to 67	5.9 to 6.9	43 to 49
Rear wheel mounting screw	75 to 90	7.6 to 9.2	55.3 to 66.4
Leaf spring mounting bolt and nut	48.0 to 55.9	4.90 to 5.70	35.4 to 41.2
Lock nut	24.0 to 28.0	2.45 to 2.85	17.7 to 20.6
Mission frame mounting bolt and nut	77.4 to 90.2	7.90 to 9.19	57.1 to 66.5
Transmission case bottom set screw	39.2 to 44.1	4.00 to 4.49	29.0 to 32.5
Transmission case side set screw	62.7 to 72.5	6.40 to 7.39	46.3 to 53.4
Engine set screw	48.0 to 55.9	4.90 to 5.70	35.4 to 41.2
Engine mounting screw	17.7 to 20.5	1.80 to 2.10	13.1 to 15.1
Front case mounting screw and nut	40 to 44	4.0 to 4.5	29 to 32
Back idle gear shaft nut	93.2 to 102	9.50 to 10.5	68.8 to 75.9
Bearing holder mounting screw	32 to 34	3.2 to 3.5	24 to 25
Bearing cover mounting screw	18 to 20	1.8 to 2.1	13 to 15
Differential support cover mounting screw	18 to 20	1.8 to 2.1	13 to 15
37T spiral bevel gear mounting screw	61 to 70	6.2 to 7.2	45 to 52
Piston case	69 to 78	7.0 to 8.0	51 to 57
Motor case mounting screw	18 to 20	1.8 to 2.1	13 to 15
Port block cover mounting screw	18 to 20	1.8 to 2.1	13 to 15
Charge pump case mounting screw	17 to 19	1.7 to 2.0	13 to 14
Unload plug	29 to 39	3.0 to 3.9	22 to 28
Hex. head socket plug	59 to 78	6.0 to 8.0	44 to 57
Anti-cavitation valve cover	49 to 59	5.0 to 6.0	37 to 43
Anti-cavitation valve case	49 to 59	5.0 to 6.0	37 to 43
Regulator mounting hexagon socket head screw	5.2 to 6.2	0.53 to 0.64	3.9 to 4.6
Servo piston and cover mounting head screw	17 to 19	1.7 to 2.0	13 to 14
Oil filter bracket mounting screw	18 to 20	1.8 to 2.1	13 to 15
Hex. socket head screw	2.5 to 3.0	0.26 to 0.30	1.9 to 2.2

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Back Idle Gear, Shaft and Needle Bearing

1. Check the needle bearing for abrasion, color change, or other damage.
2. If there is any doubt as to the condition of a needle bearing, replace it.
3. Check both the shaft and gear bearing surface.

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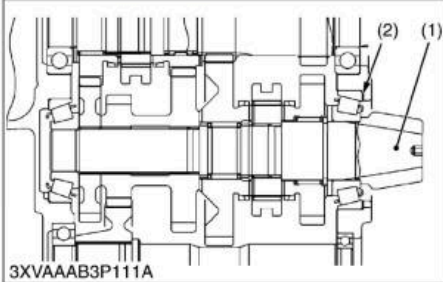


6T Spiral Bevel Pinion Shaft Turning Torque

NOTE

- It is necessary to adjust the pinion gear shaft turning torque, when replacing the 6T spiral bevel pinion shaft, taper roller bearing or other relative parts.

1. Assemble the 6T spiral bevel pinion shaft (1) to the front case. At this time, install the same shim (2) to bearing holder side.
2. Tighten the bearing holder mounting screws to specified torque.
3. Check the turning torque by using the allen socket with torque wrench.
4. Add or reduce the thickness of shim (2) to make the specified turning torque.



6T spiral bevel pinion shaft turning torque	Factory specification	0.98 to 1.2 N·m 0.10 to 0.13 kgf·m 0.73 to 0.94 lbf·ft
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(Reference)

Thickness of shim	Factory specification	0.60 mm 0.0024 in.
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- Thickness of shims
0.10 mm (0.0039 in.)
0.15 mm (0.0059 in.)
0.20 mm (0.0079 in.)
0.30 mm (0.012 in.)
0.50 mm (0.020 in.)

- (1) 6T Spiral Bevel Pinion Shaft (2) Shim

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Backlash between Differential Pinion and Differential Side Gear

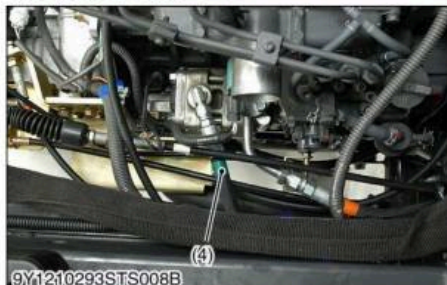
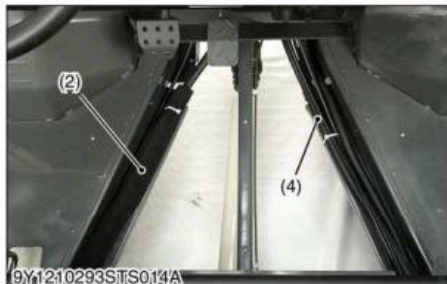
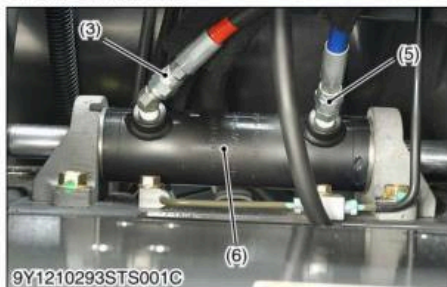
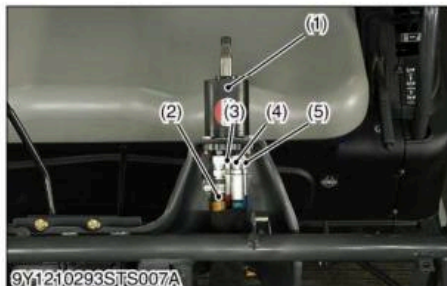
1. Secure the differential case with a vise.
2. Put the solder (0.50 mm (0.020 in.) thickness) on the position where the tooth of the differential side gear.
3. Temporarily install the propeller shaft assembly and rotate the propeller shaft carefully.
4. Measure the backlash by thickness of the point where solder is the thinnest.
5. If the backlash exceeds the allowable limit, adjust with differential side gear shims.

Backlash between differential pinion and differential side gear	Factory specification	0.15 to 0.30 mm 0.0059 to 0.011 in.
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(Reference)

- Thickness of shims
1.5 mm (0.059 in.)
1.6 mm (0.063 in.)
1.7 mm (0.067 in.)

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Power Steering Hoses

1. Disconnect the steering hoses (2), (3), (4), (5) from steering controller (1).
2. Disconnect the cylinder hose RH (3) and LH (5) from power steering cylinder (6), and remove the cylinder hose RH (3) and LH (5).
3. Remove the return hose (2).
4. Remove the delivery hose (4).

(When reassembling)

- Be sure to connect the power steering hoses to their original position, and tighten them to the specified torque.
- Fill new oil from filling port after removing the filling plug up to the upper notch on the dipstick.
- After running the engine for few minutes, stop it and check the oil level again, if low, add oil to prescribed level.
- Use prescribed oil.
- Refer to "LUBRICANTS, FUEL AND COOLANT". (See page G-8.)
- Never work the vehicle immediately after changing the power steering oil. Keeping the engine at medium speed for a few minutes to prevents damage to the hydraulic pump etc..
- Do not mix different brands oil together.

Tightening torque	Power steering hose retaining nut	21.6 to 25.7 N·m 2.21 to 2.62 kgf·m 16.0 to 18.9 lbf·ft
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- (1) Steering Controller
 (2) Return Hose
 (3) Cylinder Hose RH

- (4) Delivery Hose
 (5) Cylinder Hose LH
 (6) Power Steering Cylinder

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Full Version Available

Kubota RTV1140CPX Utility Vehicle Workshop Manual

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

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