WSM

WORKSHOP MANUAL
KUBOTA EXCAVATOR
K008-3
U10-3

Kubota

Code No.97899-60731

MidWestTech | Kubota K008-3, U10-3 Mini Excavator Service Manual | Publication 97899-60731

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I. GENERAL

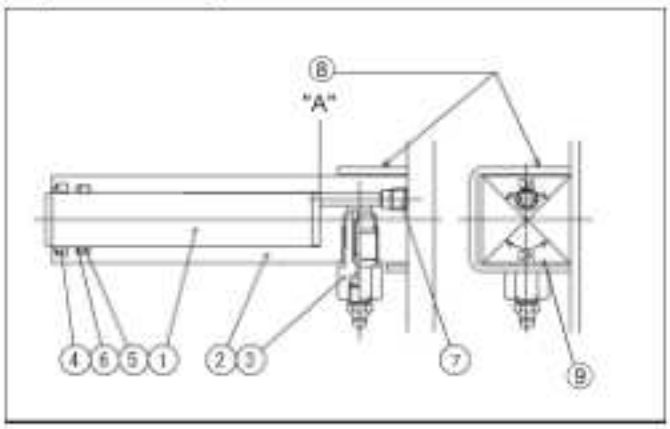
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IMPORTANT:
Kubota Corporation reserves the right to change specifications without notice and without incurring any obligation relating to such change.
Availability of some models and equipment builds vary according to the country in which the equipment is used. The illustrations and text may include optional equipment and accessories and may not include all standard equipment. Your Kubota dealer/distributor will be able to give you details of the products and their specifications available in your area.

Always read the Operator's Manual before operating any equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs and use any safety features provided.

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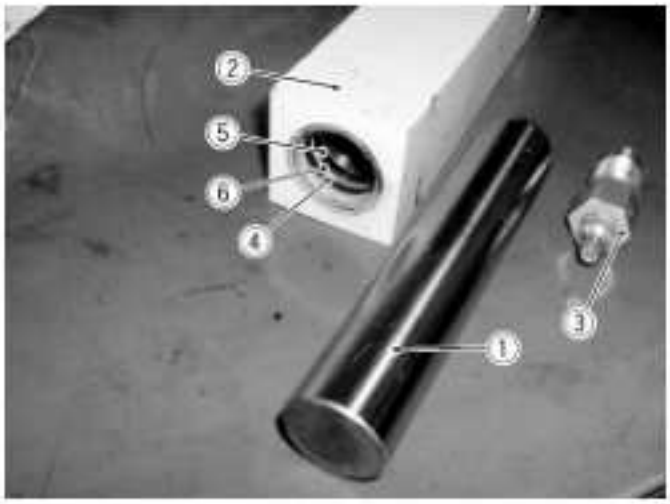
(3) Grease cylinder



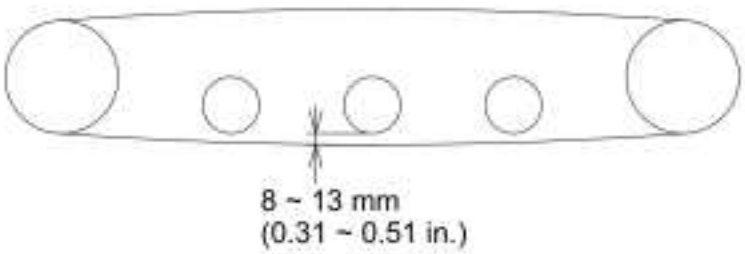
■ Assembly procedure

1) Nipple assembly tightening torque:
   103.0 ~ 108.0 N·m (10.0 ~ 11.0 kgf·m)
   72.3 ~ 79.6 ft·lbs
   * Tighten it twice.
2) Apply oil (NEW UDT, M80B or equivalent) to dust seal, O-ring and backup ring when assembling them.
   * Mount the backup ring so that its mating face should be horizontal.
3) Grease injection
   Push the shim up to "A" and inject grease.
   * DYNAMAX EP2 or equivalent
4) Tension of crawler (rubber crawler specification)
   8 ~ 13 mm (Dimension between the track roller and the core of rubber crawler)
5) Parts list

⑧ Guide of track frame side
⑨ Mating face of backup ring should be directed in OK direction.



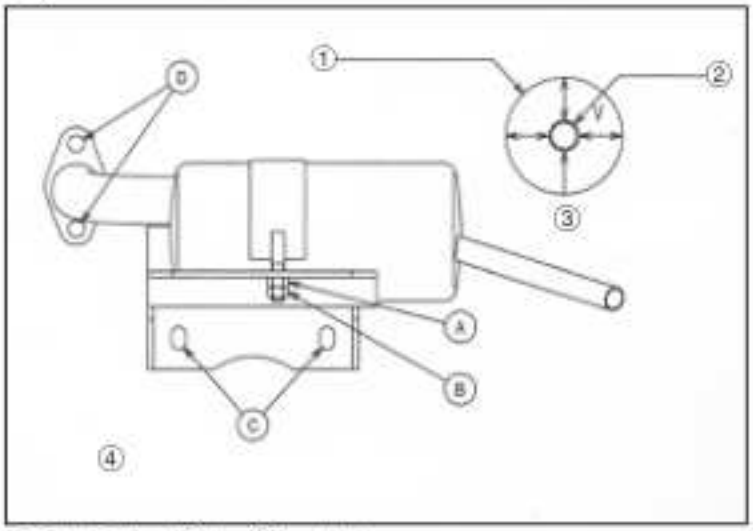
No.	Parts Name	Q'ty
①	Cylinder tube	1
②	Rod	1
③	Nipple, assembly	1
④	Dust seal	1
⑤	O-ring	1
⑥	Ring (backup	1
⑦	Plug (PT1/8)	1



Ensure a clearance of 8 ~ 13 mm (0.31 ~ 0.51 in.) between the track roller and the rubber crawler's core. Idle-run the crawler 5 ~ 6 turns and measure the clearance with the ∞ marking upward.

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(2) Muffler



① Weight, left (muffler hole)
② Tail pipe
③ Provide clearance of more than 15 mm (0.59 in.).
④ Tighten the parts in the order of→Ⓐ→Ⓑ→Ⓒ→Ⓓ.

Assembly procedure

1) Band (Muffler) tightening torque:
   * Tighten the parts in the order of →Ⓐ→Ⓑ→Ⓒ→Ⓓ.
2) Provide a clearance of more than 15 mm (0.59 in.) between the tail pipe and the weight.

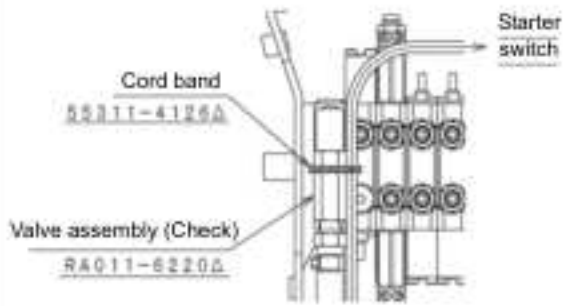


Tightening torque:
Ⓐ 5.4 ~ 6.4 N·m (0.55 ~ 0.65 kg·fm)
3.98 ~ 4.70 ft·lbs

Tightening torque:
Ⓑ 39 ~ 56 N·m (4.0 ~ 4.6 kg·fm)
28.9 ~ 33.3 ft·lbs

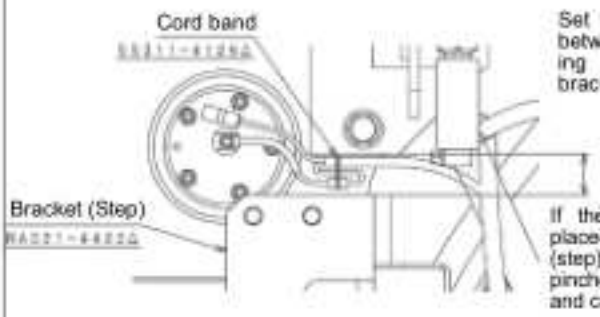
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(3) Clamp to valve assembly (check)



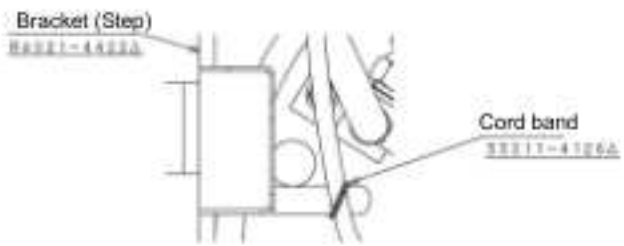
* Pass the wire harness through the inside of the valve assembly (check) and clamp it securely.

(4) Wiring to fuel sensor



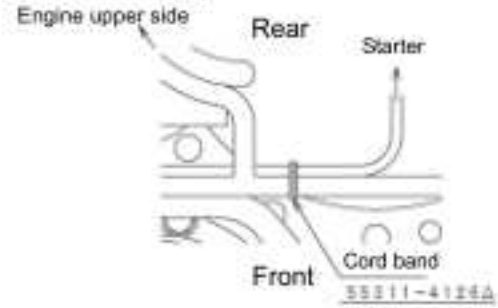
* Insert the clamped wire harness between the operation panel and the bracket of step.

(5) Clamping to bracket (step)



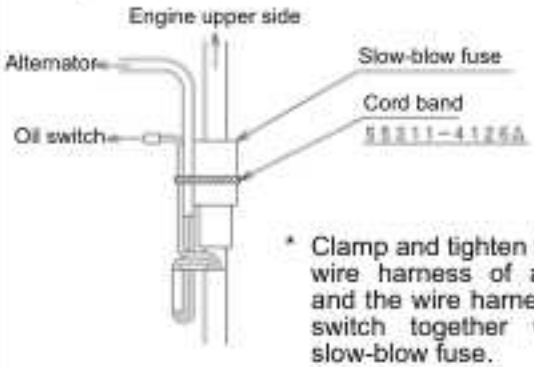
* Clamp the cord band securely to the bracket (step).

(6) Clamping of wire harness (1) and the battery plus cord



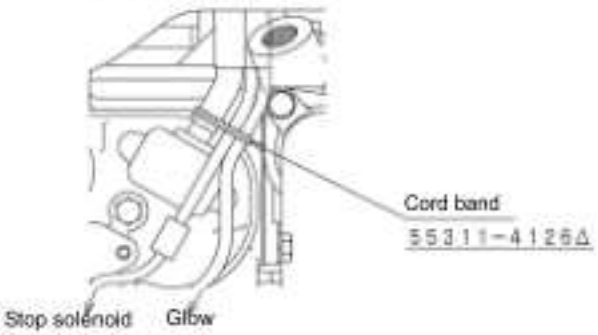
* Securely clamp the wire harness (1) and the battery.

(7) Clamping of wire harness for alternator, oil switch and slow-blow fuse



* Clamp and tighten the loose wire harness of alternator and the wire harness for oil switch together with the slow-blow fuse.

(8) Clamping to the engine breather



* Clamp the wire harness to the engine breather's iron part.





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⚠ CAUTION

To avoid personal injury:
- **When raising or folding the ROPS, stop the engine and remove the key. Always perform function from a stable position at the rear of excavator.**
- **Fold the ROPS down only when absolutely necessary and fold it up and lock it again as soon as possible.**



ROPS (Front Mount Type)
Mounting bolt: M20



(Left side)

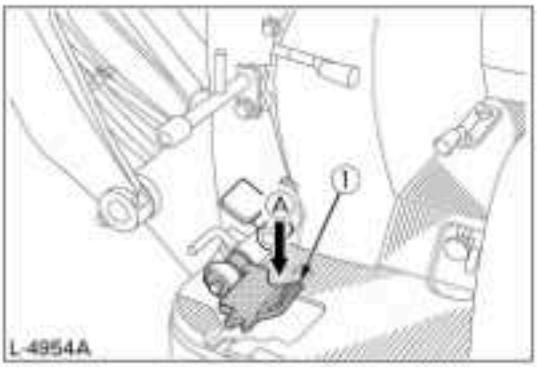


(Right side)

Mounting bolt:
M10 X 25 (9T),
M10 X 30 (9T),
M10 X 50 (9T)
Tightening torque:
48.1 ~ 55.9 N·m
(4.9 ~ 5.7 kgf·m)
35.4 ~ 41.2 ft·lbs

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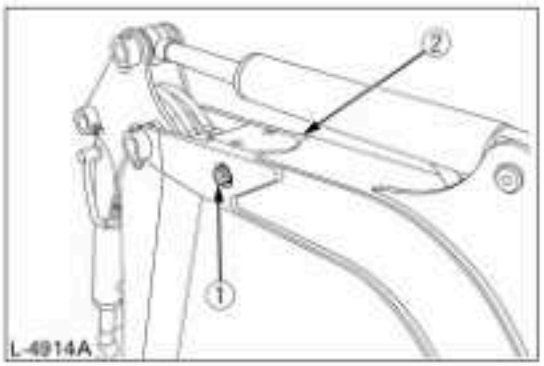
n. Service Port Operation



This pedal is used to operate attachments such as breakers.

1. Service port pedal
   Step on the service port pedal and pressured oil starts flowing through the "P" port from the control valve. The oil then returns through the "T" port into the tank.

(1) Service port pedal
(A) "Operate"



(1) "P" (Pressure) port
(2) "T" (Return) port

NOTE:
- When the service port is not use, put the cover on the pedal. The pedal gets fixed and can be used as footrest.



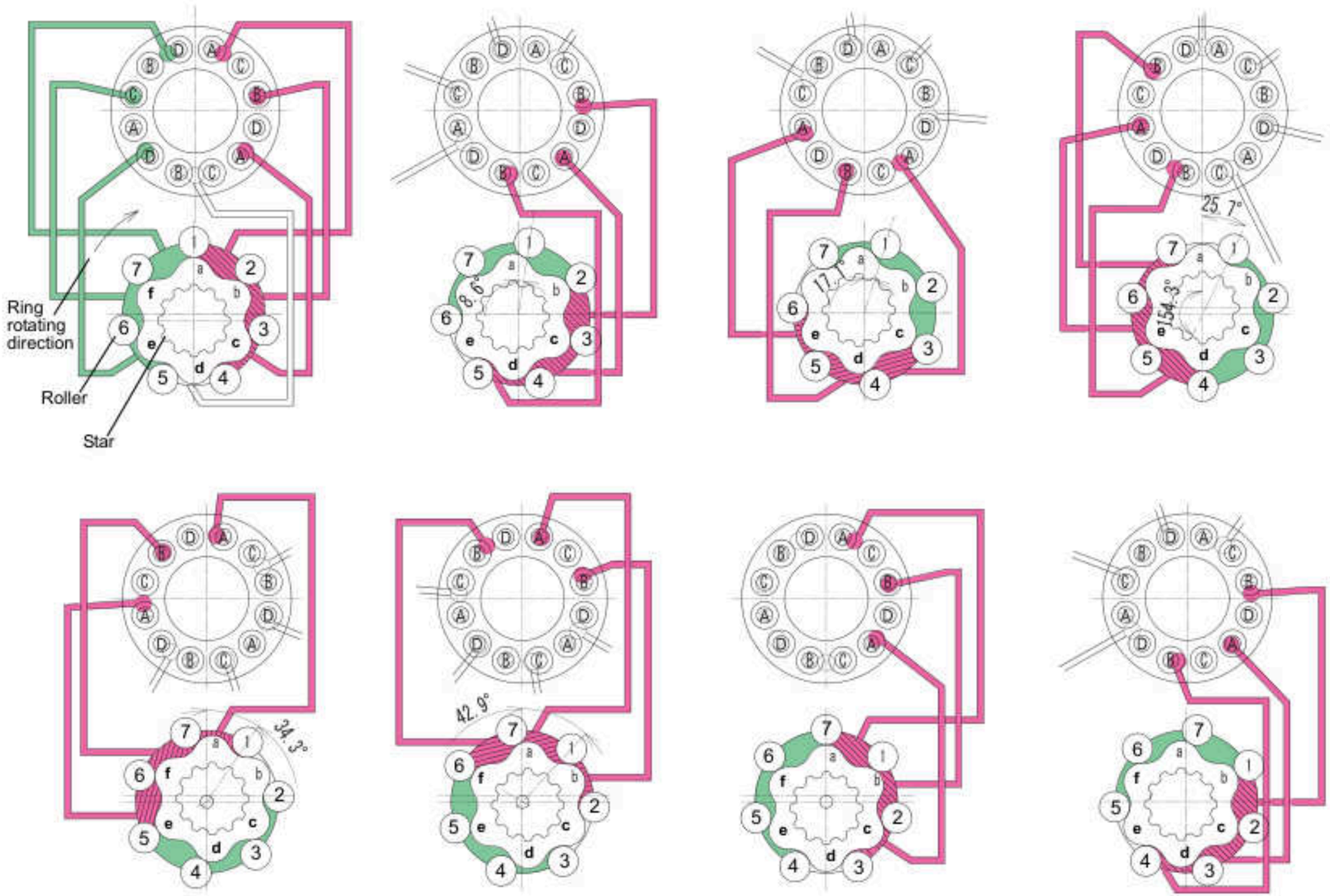


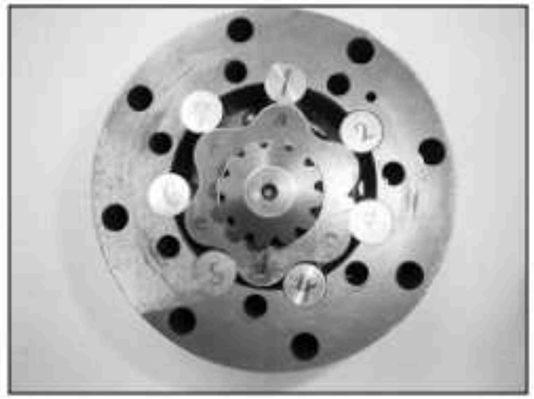
Service ports, P-port and T-port change can be applied from the following serial numbers respectively

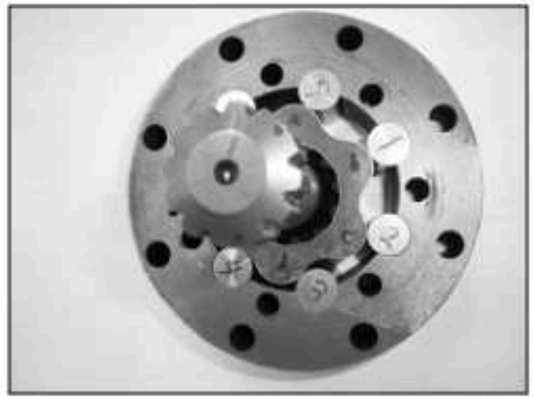
K008-3: From S/N18431 ~
U10-3: From S/N15877 ~

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3. Oil flow & Rotation: Low speed





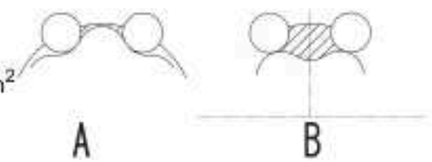


1. Preferably follow the movement of the roller ① among others.
2. When the roller ① has turned from the star's tooth a to its tooth b, the star's center has made a revolution.
3. Because the roller is integrated with the ring, the ring can be regarded as turning on its own axis.
4. The roller ① keeps turning on its own axis.
   a → 1 b → 2 c → 3 d → 4 e → 5 f → 6 a
5. With this in mind, roller ① shows one turn completed.
6. During this time, the star makes 6 revolutions.
7. While the ring makes a turn, the star makes 6 revolutions. The expansion and exhaust cycles are produced by both of them.
8. The then displacement is obtained in the following.
   $\upsilon = ds \times 6 \times 7 \times t = 311$ cc

1. One revolution means the distance from the cross between the roller's point 1 and the star's tooth a to that between the roller's point 1 and the next tooth b.

2. The displacement is calculated like this:
   Area difference (see at right) × 6 × 7 × geroller's thickness.
   This is because the star's one revolution produces the cycle of A → B → A in the 7 chambers and the star makes 6 revolutions as the ring makes a turn.

(Sample)
Area difference ds = 2.146 cm^2
Geroller's thickness t = 45 cm
Displacement v = 311 cc



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