

For Earth, For Life



KUBOTA Technical Support centre Europe

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Zweibrücken
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SERVICE – BULLETIN

Reference-N°: KTSE - SB - 2208

Arm Cylinder Rod Eye Crack

Approved by:	<input checked="" type="checkbox"/> International Quality Assurance department
	<input type="checkbox"/> Kubota Technical Support centre Europe

Affected distributors:

- ☒ KBD
- ☒ KE
- ☒ KUK

Classification:

- ☐ 1. Information
- ☒ 2. Fix on a failure basis
- ☐ 3. Recommended product improvement
- ☐ 4. Mandatory campaign

Model	Serial N°
KX027-4	→ 56244
KX030-4	→ 52206

A. Subject

Cases of cracked off rod eye of the arm cylinder have been reported. Investigations revealed that the cause is excessive stress concentration at the transition area of the rod eye.

As a series countermeasure, the new cylinder was adopted with an improved shape of the rod eye and a stronger material.

We herewith inform you the measures to take in such a failure case.



B. Service Information

WARNING:

To avoid personal injury:

- Park the machine on a flat and level ground.
- Keep the bucket or other attachment down on the floor.
- Stop the engine and remove the starter key.
- Use working clothes and personal protective equipment to avoid personal injury.
- Follow the local safety directives in your country.
- If you work with other persons, make sure your signals are fully understandable and mutually communicative for added safety.
- Hydraulic components and engine parts can be hot. Wait until all components cooled down to avoid burns.

Repair outline:

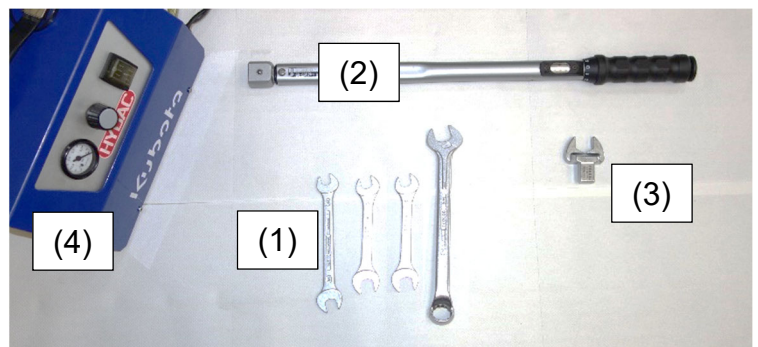
In case of a broken rod eye on the machines listed above, replace the arm cylinder according to the following procedure.

Tools:

- (1) Spanners, 12, 2x 14, 22 mm
- (2) Torque wrench, 20 N·m - 100 N·m
- (3) Socket, 22 mm
- (4) Vacuum pump with G 3/4" adapter

Not shown:

Oil tray

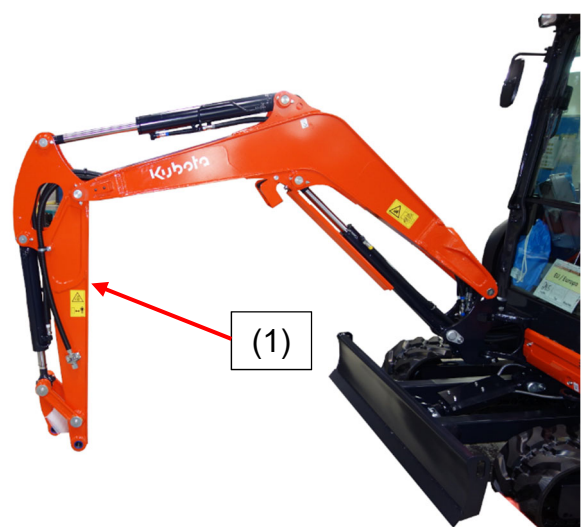


Note:

Tightening torques not indicated in the present service bulletin are to be taken from the torque specification tables of the machine workshop manual.

Step 1:

Place the arm (1) vertical with the front attachment slightly above the ground.



Step 2:

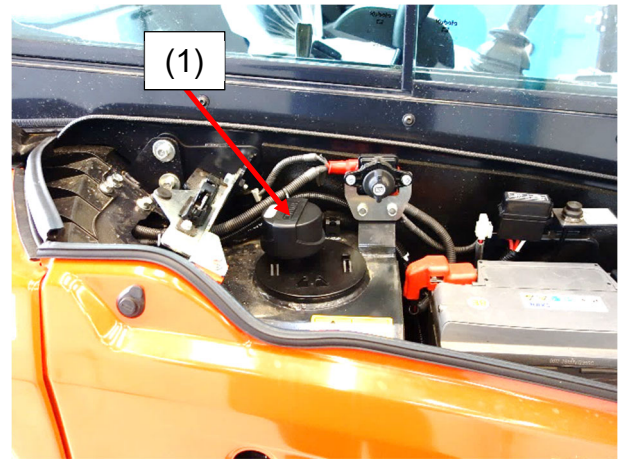
Stop the engine and release the residual pressure from the arm cylinder circuit only.

Step 3:

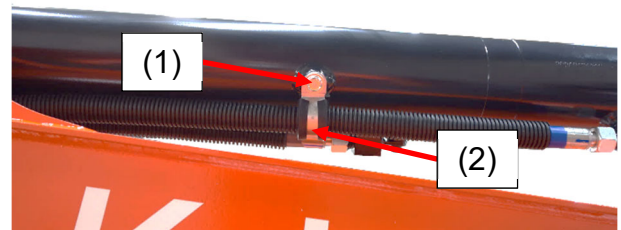
Open the RH top cover (1).

**Step 4:**

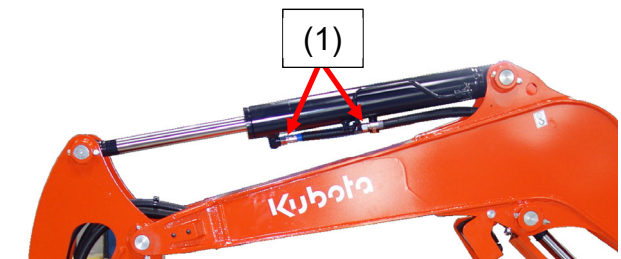
Remove the breather filter (1) from the hydraulic tank. Install the vacuum pump adapter and connect the vacuum pump.

**Step 5:**

Remove the bolt (1) of the hose clamp (2).

**Step 6:**

Disconnect the two hydraulic hoses (1) from the arm cylinder.

**Step 7:**

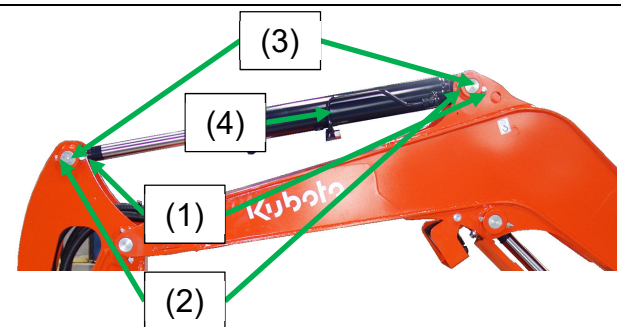
Remove the locking nuts (1), the securing bolts (2) and the arm cylinder pins (3) to remove the arm cylinder (4).

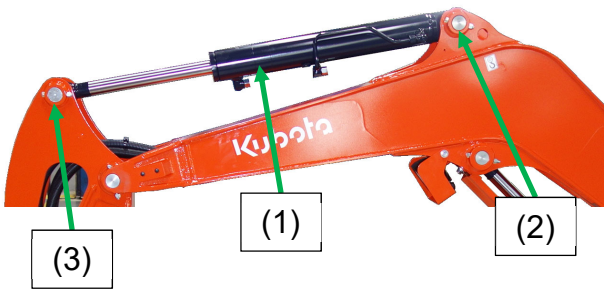
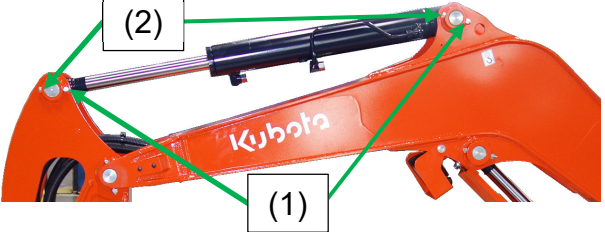
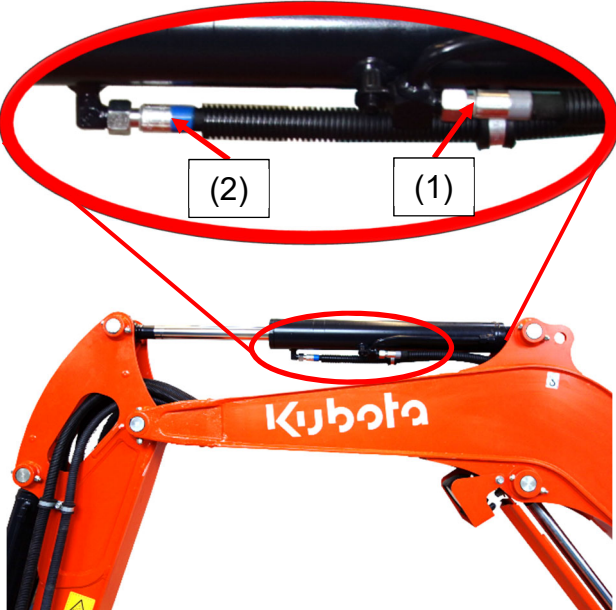
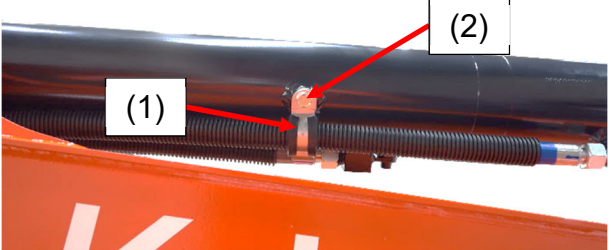
Note:

The shims and the securing bolts can be reused.

The arm cylinder and the locking nuts can be scrapped.

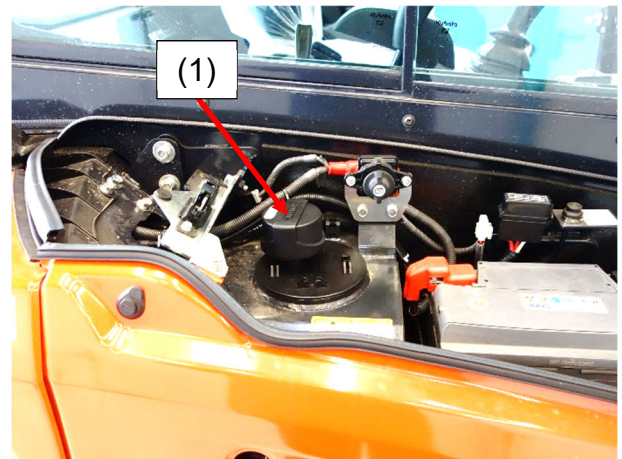
The approximate weight of the arm cylinder is 23 kg.



<p>Step 8: Install the new arm cylinder (1) (RG268-6760-3 for KX027-4 or RG468-6760-3 for KX030-4) with the pins (2) and (3).</p>	
<p>Step 9: Adjust the thrust play at cylinder tube pin side (2) as well as rod pin side (3) by inserting shims (RG246-6694-0 for 0,5 mm, RG246-6695-0 for 1 mm).</p> <p>Thrust play: max. 0,5 mm</p> <p>Note: The shims' thickness is 0,5 mm or 1,0 mm. If possible, use the shims removed in step 7.</p>	
<p>Step 10: Install the securing bolts (1) with the new lock nuts (2) (02572-5010-0).</p>	
<p>Step 11: Connect the grey marked hydraulic hose (1) to the cylinder rod side and the blue marked hydraulic hose (2) to the cylinder bottom side, as shown in the picture.</p> <p>Tightening Torque: 40,0 N·m – 45,0 N·m.</p>	
<p>Step 12: Attach the hose clamp (1) with the bolt (2).</p>	

Step 13:

Disconnect the vacuum pump and reinstall the breather filter (1).

**Step 14:**

Close the RH top cover (1).

**Step 15:**

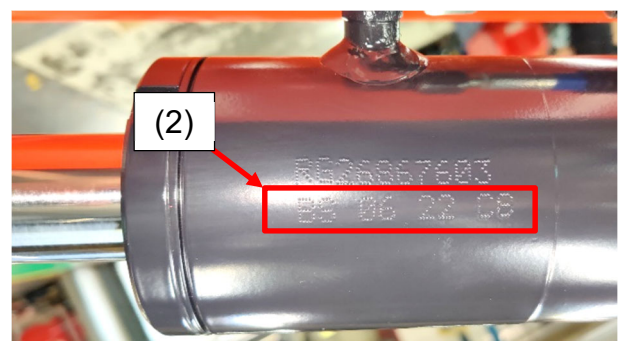
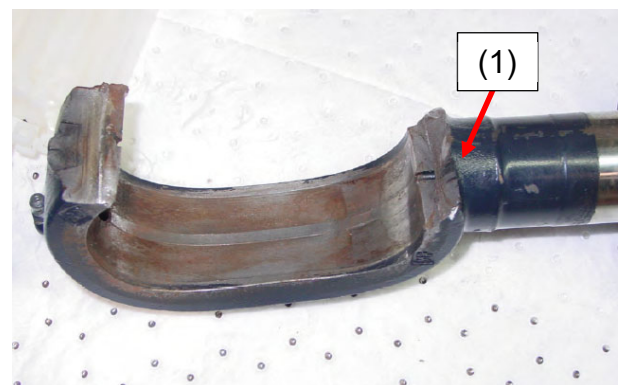
Grease the arm cylinder pins on rod side and bottom side.

Step 16:

Start the engine carefully with idle rpm and move the arm cylinder slowly against the end stroke in both direction several times to bleed the air from the cylinder.

Step 17:

Take two clear pictures, one showing the rod eye crack (1), the other the batch number (2) of the cylinder.



C. Spare Part Information

Part number	Part name	Qty
RG268-6760-3	Arm cylinder for KX027-4	1
RG468-6760-3	Arm cylinder for KX030-4	1
02572-5010-0	Locking nut	2
RG246-6694-0	Shim (0,5 mm) (as required)	-
RG246-6695-0	Shim (1,0 mm) (as required)	-

D. Warranty Information

1. Conditions:

For this specific problem, up to 5 years after machine retail date:

Parts: Yes
Labour: 1,0 hour
Mileage: Yes
Campaign allowance: No

2. Replaced parts:

☐ Return ☐ Store ☒ Attach photos to claim, then scrap ☐ Scrap

This instruction has priority to the ones given by Kubota Net at time of claim posting.

Ensure to mention this bulletin's reference number on the related warranty claim.