

# Kubota

# SUBJECT: AIR CONDITIONING BLOWER MOTOR WATER INGRESS

Bulletin No:

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Ref.PB No :

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MODEL: KX060-5, U56-5, AND U50-5 AFFECTED SERIAL NUMBER: ALL

AFFECTED COUNTRY: KE, KUK, AND KBD

**REASON FOR ISSUE:** 

Cases are reported that the air conditioning blower motor is failed. Investigation revealed there are two types of failure.

- 1) The drain pipe was clogged by dirt and then condensation water from the evaporator could not be drained any more. Then, the blower motor at the bottom of the air conditioning system was submerged.
- 2) Customer washed inside the cabin and the air conditioning system was exposed to water. As it is clearly mentioned in the OPM, the air conditioning system is not waterproof, hence the blower motor at the bottom of the air conditioning system failed.

We herewith inform you of the measure to be taken in such cases and request you to advise the customers with the OPM in case of type 2.

#### **OPM DESCRIPTION:**

The air-conditioning/heater unit proper is not waterproof.

In the following cases, pay attention not to get the air-conditioning/heater unit exposed to water.

- Drinking water or the like has spilt over the seat mount.
- The cabin window(s) is (are) kept open is the rain.
- Before cleaning the foor/seat mount.

#### **PARTS INFORMATION:**

No.	Parts No.	Parts Name	Q'ty	Remarks
1	1 RD579-44230 SEAL (A/C)		1	_
2	RD579-44220	GROMMET (STEP)	2	_
3	V0511-34960	CLIP	6	_
4	R2631-93842	MOTOR, ASSY (W/FAN)	1	_

MODEL CODE and MODEL NAME: Refer to the attached sheet.

#### **⋈ WARRANTY INFORMATION**

- ☐ Mandatory Campaign : Allowable Man-hours ;
- ▼ Technical Bulletin : Allowable Man-hours ; 11 hrs.
   Expiration date : 5 years from machine retail date
- ☐ Quality Related Information :

#### ☐ SERVICE INFORMATION

# **REPAIR PROCEDURE**

# Photo of tools



# Required tools

- 1					
No.	Tool Name	Remarks			
1	Hammer				
2	Scriber				
3	Punch				
4	Drill	(/)5 mm			
5	Hole saw	(/)35 mm			
6	Hand drill				
7	Right angle scale				
8	Scale				
9	Round file				
10	Flat file				
11	Degree gauge				



To avoid personal injury or death:

- · Park the machine on a firm and level ground.
- · Lower the bucket to the ground.
- · Set all controls in their neutral positions.
- · Release all residual pressure of the hydraulic system.
- Stop the engine. Remove the key from the ignition.
- The engine, hydraulic components and coolants can be hot.
   Wait until all the components are cooled down suiciently to avoid burns.
- Do not open the radiator cap soon after the engine has stopped. There is a possibility of serious burn injury due to the coolant blowing out from the radiator.
- Clean the work area and the machine.
- · Disconnect the battery negative cable.
- Hang a "DO NOT OPERATE" tag on the operator station.
- · Put on working clothes and personal protective equipment.
- Read all instructions and safety instructions in this bulletin and safety labels on your machine
- Follow the local safety regulations and/or laws in your country.
- If you are working with other people, make sure that your signals and communications are fully understandable for additional safety.



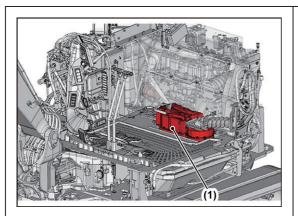
# CAUTION

- Wear gloves, work clothing, and eye protector to protect your skin and eyes. Liquid refrigerant may cause frostbite hazard due to evaporation.
- Keep fire and lammable items away from the working area.
   Do not wash the cooling circuit with water. Residual water in the cooling circuit may cause corrosion.

#### **■ IMPORTANT**

- Use the refrigerant and parts specified by R134a. Mixing with other refrigerants or using parts which are not specified by R134a may cause leakage, performance decrement, and so on.
- · Apply compressor oil to every O-ring to avoid damage when installing.

# 1. Removing the air conditioning unit

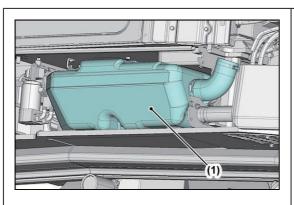


1. Remove the air conditioning unit (1) according to the machine WSM.

#### **■** NOTE

- Chapter 8. AIR CONDITIONING AND HEATER SYSTEM
  - > SERVICING
  - > 4. Repairing
  - > 4.2 Air conditioning unit
  - > 4.2.1 Removing and installing the air conditioning unit (KX060-5)
  - > 4.4 Air conditioning unit
  - > 4.4.1 Removing and installing the air conditioning unit (U56-5 and U50-5)
- (1) Air conditioning unit: Reuse

### 2. Removing the fuel tank

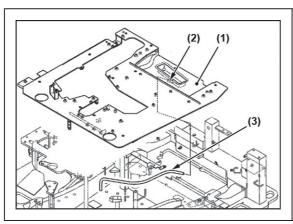


1. Remove the fuel tank (1) according to the machine WSM.

#### **■** NOTE

- Chapter 5. ENGINE > SERVICING
  - > 4. Repairing
  - > 4.1 Fuel hose and tank
  - > 4.1.1 Removing and installing the fuel
- Removing steps 2, 3, 4, 5, 6, 7, 8, 9, 10 can be skipped for KX060-5.
- Removing steps 2, 3, 4, 5, 6 can be skipped for U56-5 and U50-5.
- (1) Fuel tank: Reuse

#### 3. Cleaning the step

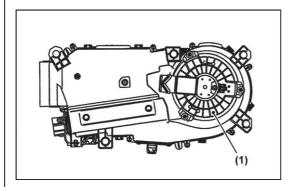


1. Clean the step plate (1), the drain pipe (2), and the drain hose (3).

# **■** IMPORTANT

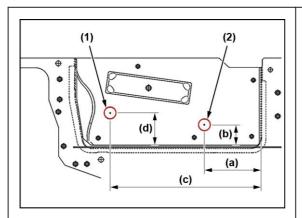
- If dirt remains in the drain line, the failure can reoccur.
- (1) Step plate : Reuse(2) Drain pipe : Reuse
- (3) Drain hose: Reuse

# 4. Replacing the blower motor



- 1. Replace the blower motor (1) according to the machine WSM.
- NOTE
- Chapter 8. AIR CONDITIONING AND HEATER SYSTEM
  - > SERVICING
  - > 4. Repairing
  - > 4.2 Air conditioning unit
  - > 4.2.1 Removing and installing the air conditioning unit
  - > 4.2.1.3 Removing the blower (KX060-5)
  - > 4.4 Air conditioning unit
  - > 4.4.1 Removing and installing the air conditioning unit
  - > 4.4.1.3 Removing the blower (U56-5 and U50-5)
- (1) Blower motor (R2631-93842)

# 5. Measures for the step



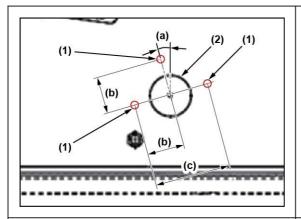
1. Drill the (/)35 holes (1) (2) for the additional outlet openings.

Dimension (a)	168.0 mm	
Difficitision (a)	6.6 in.	
Dimension (b)	68.0 mm	
Difficitision (b)	2.7 in.	
Dimension (c)	448.0 mm	
Diffierision (c)	17.6 in.	
Dimension (d)	103.0 mm	
Dimension (a)	4.1 in.	

- (1) (/)35 hole (machine RH side)
- (2) (/)35 hole (machine LH side)
- (a) (1) (b) (c) (c)
- 2. Drill the (/)5 holes (1) for the clips of the grommet.

Angle (e)	45°		
Angle (a)	0.79 rad		
Dimension (b)	32.0 mm		
Diffierision (b)	1.3 in.		
Dimension (c)	64.0 mm		
	2.5 in.		

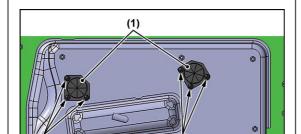
- (1) (/)5 hole ×3
- (2) (/)35 hole (machine RH side)



3. Drill the (/)5 holes (1) for the clips of the grommet.

Angle (a)	15°	
Aligie (a)	0.26 rad	
Dimension (b)	32.0 mm	
Dimension (b)	1.3 in.	
Dimension (a)	64.0 mm	
Dimension (c)	2.5 in.	

- (1) (/)5 hole ×3
- (2) (/)35 hole (machine LH side)



(a)

(b)

(2)

(1)

4. Deburr the holes from the steps 5.1 - 5.3.

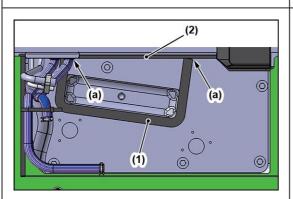
5. Install the grommets (1) with the clips (2) on the bottom side of the step.



 The grommets are not reversible. Install as the figure shows.

#### ■ NOTE

- The figure shows the view from the bottom side.
- (1) Grommet (RD579-44220) ×2
- (2) Clip (V0511-34960) ×6
- (a) Upper side (facing to the step plate)
- (b) Lower side (facing to the fuel tank)



6. Install the seal (1) to the step plate.

#### **■ IMPORTANT**

- Degrease the surface of the seal installation area of the step plate for better adhesion quality.
- The end of the seal (1) should contact the rear seal (2) to prevent dirt intrusion into the original drain area.
- (1) Seal (RD579-44230)
- (2) Rear seal
- (a) Contact

#### 6. Reassembling

Reassemble the fuel tank and air conditioning unit in the reverse order of the disassembling procedure.
Start the engine and check for the air conditioning and heater function.