



Kubota

Bulletin No :
CM-23-026-01-KEEN
 Date : Jul. 21, 2023
 Ref.PB No :

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Kubota Europe S.A.S

SUBJECT :
WIPER MOTOR FAILURES

MODEL : U27-4

AFFECTED SERIAL NUMBER : U27-4 EU ; UP TO #77185

AFFECTED COUNTRY : KBD, KE AND KUK

REASON FOR ISSUE :

Cases of failing wiper motors have been reported. Investigations revealed that the most frequent cause is water ingress. The wiper motor location and its limited protection on this model easily allows water infiltration into the electrical motor. As a countermeasure, a water protecting cover was added to the wiper motor.

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

PARTS INFORMATION :

No.	Parts No.	Parts Name	Q'ty	Remarks
1	RH418-4673-2	Cover (wiper motor)	1	-
2	RH418-4674-0	Cover (front wiper motor)	1	-
3	RH418-4672-0	Motor (wiper)	1	Kit parts

MODEL INFORMATION :

KBD, KE, KUK	
Model Name	Model Code
U27-4 L KUK	RGH1124250
U27-4 GL KUK	RGH1123250
U27-4 GL HI	RGH1523200
U27-4 GL B HI	RGH1523210
U27-4 GL HI KUK	RGH1523250
U27-4 GL BOELS	RGH1123B00
U27-4 GL	RGH1123200
U27-4 GL B	RGH1123210
U27-4 L	RGH1124200

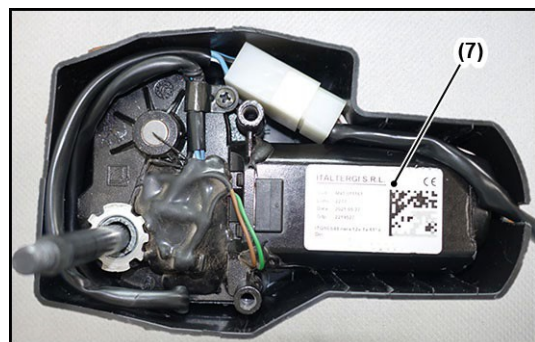
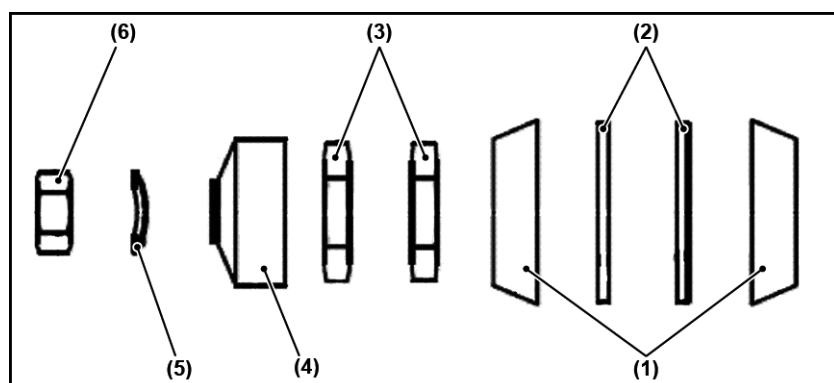
☒ **WARRANTY INFORMATION**

- ☐ Mandatory Campaign : Allowable Man-hours ;
- ☒ Technical Bulletin : Allowable Man-hours ; 0.8 hrs.
Expiration date : 5 years from machine retail date
- ☐ Quality Related Information

☐ **SERVICE INFORMATION**

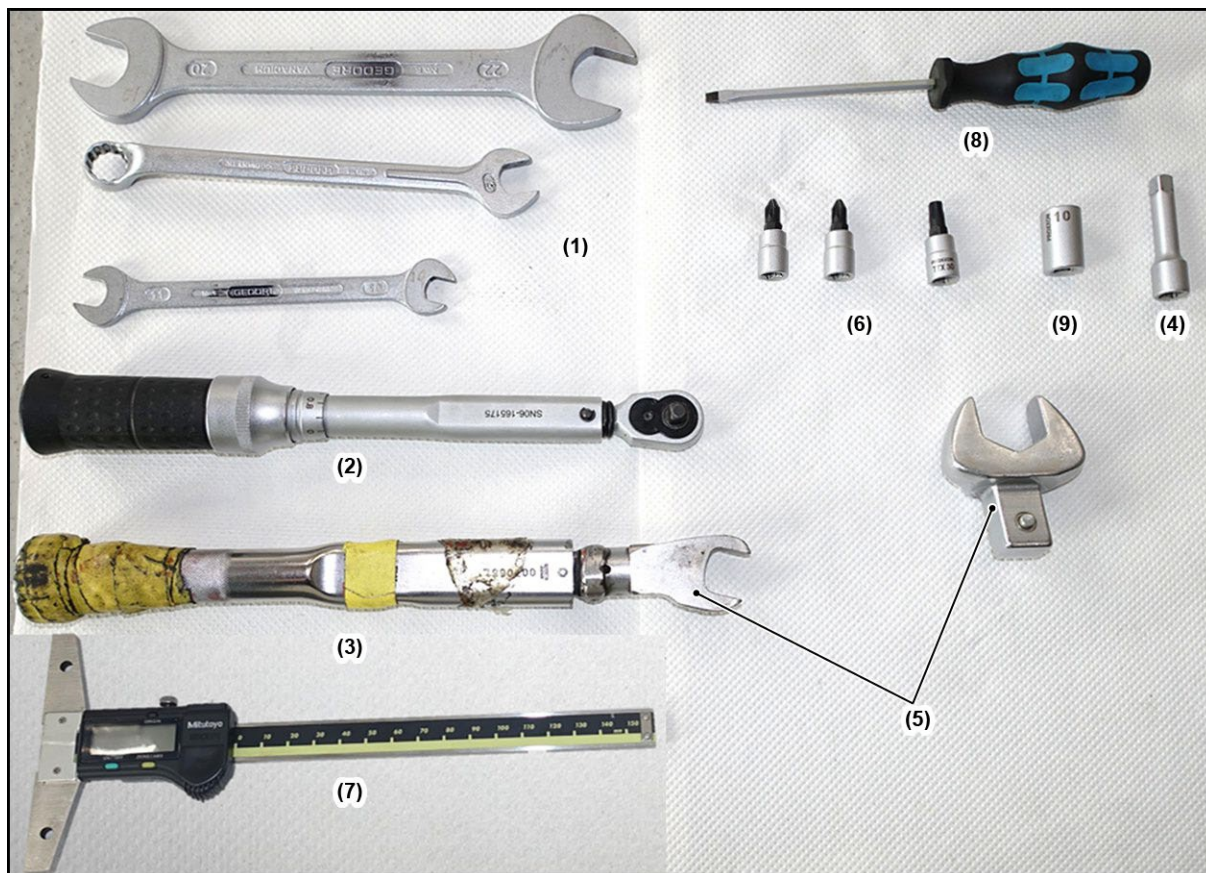
1. Wiper motor kit: RH418-4672-0

REF No.	Part Name	Q'ty	Remarks
(1)	Distancer	2	-
(2)	Flat seal	2	-
(3)	Nut	2	-
(4)	Cap	1	-
(5)	Spring washer	1	Scrap
(6)	Nut (wiper)	1	-
(7)	Wiper motor	1	-



All parts listed in the parts list and which are removed must not be reused.
Others must be reused.

2. Required tools:



N°	Tool Name	Remarks
(1)	Spanners 10, 13, 22 mm	
(2)	Torque ratchet 1/4"	Required torque: 8 to 17 N·m
(3)	Torque wrench	Required torque: 8 to 17 N·m
(4)	Extension bar 1/4", 50 mm	
(5)	Open sockets, 13, 22 mm	
(6)	Sockets 1/4", PH 2, PH 3, TX 30	
(7)	Calliper, 150 mm	
(8)	Screwdriver, slotted, 0,8x4,0 mm	
(9)	Socket 1/4", 10 mm	

■ Notes

- Tightening torques not indicated in the present service bulletin are to be taken from the torque specification tables of the machine workshop manual.
- Parts listed in the Part Information and removed during repair are not to be reused. Others are to be reused.

INTRODUCTION

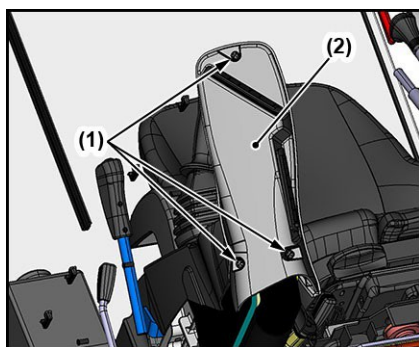
WARNING

To avoid personal injury or death, and to comply with laws and regulations:

- Park the machine on a firm and level ground.
- Lower the bucket and attachments 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 have cooled down sufficiently to avoid burns.
- 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 the safety instructions in this instruction manual, the Workshop Manual, the Operator's Manual and the labels.
- 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.

1. Removal of the wiper motor

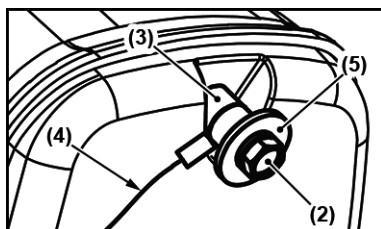
For Non EU machines



1. Remove the screws (1) and the cover (2).

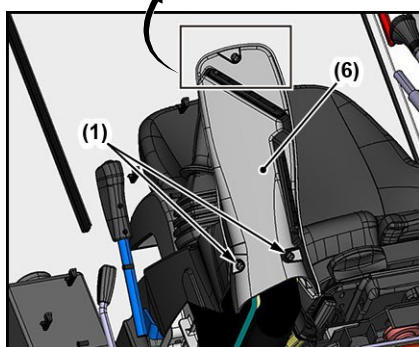
- (1) Screw x3
- (2) Cover

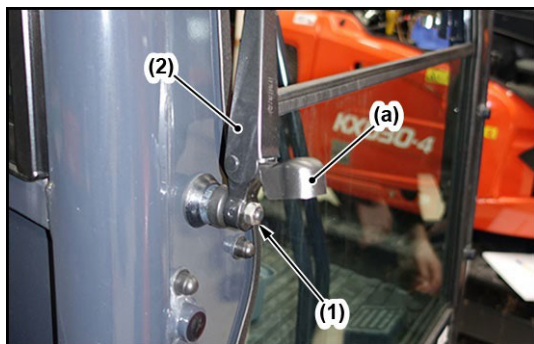
For EU machines



1. Remove the screws (1), the bolt (2), with the collar (3), the rope (4), the washer (5), and the cover (6).

- (1) Screw x2
- (2) Bolt
- (3) Collar
- (4) Rope
- (5) Washer
- (6) Cover





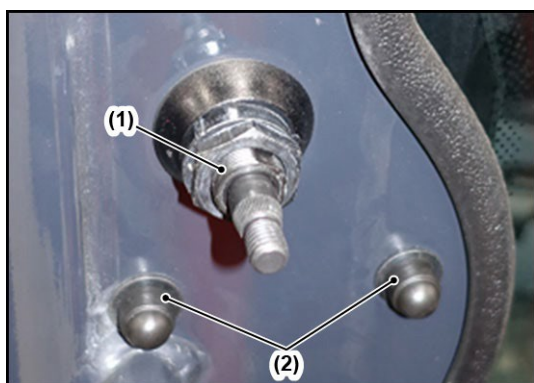
2. Open the cover (a) and remove the nut (1) to remove the wiper arm (2).

- (1) Nut
- (2) Wiper arm
- (a) Cover



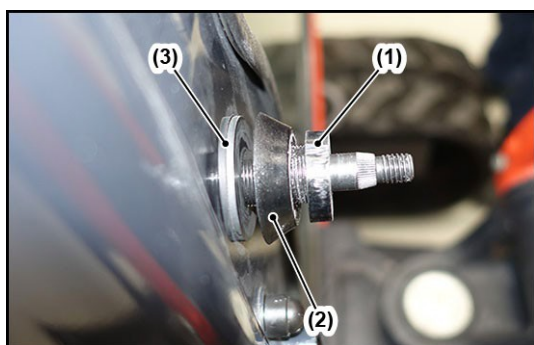
3. Remove the cap (1).

- (1) Cap



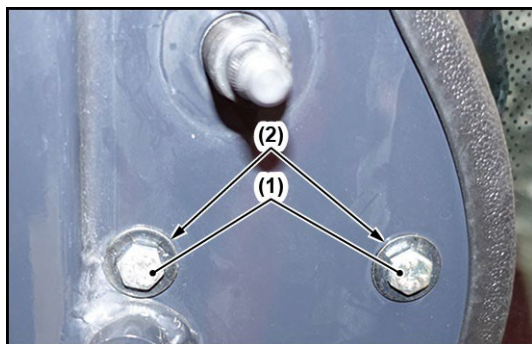
4. Remove the nut (1) and the caps (2).

- (1) Nut
- (2) Cap x2



5. Remove the bushing (1), the distancer (2), and the flat seal (3).

- (1) Bushing
- (2) Distancer
- (3) Flat seal

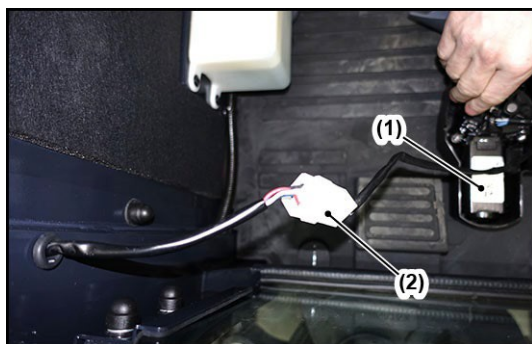
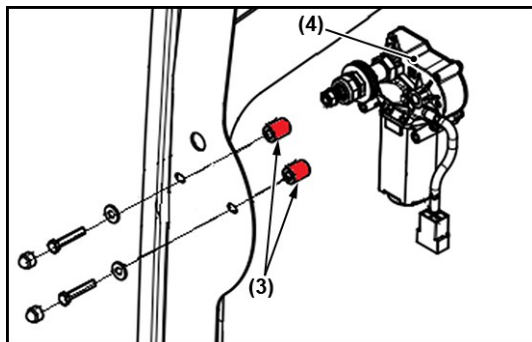


6. Remove the bolts (1), the washers (2), and bushings (3).

■ **NOTE**

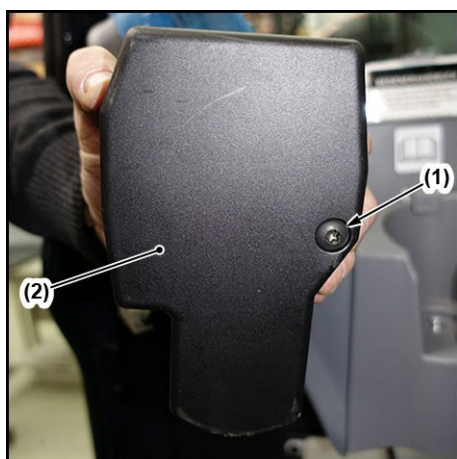
- The wiper motor (4) is mounted with bushings (3) between the wiper motor (4) and the cabin frame.

- (1) Bolt x2
(2) Washer x2
(3) Bushing x2
(4) Wiper motor



7. Pull out the wiper motor (1) from the inside of the cabin and disconnect the connector (2).

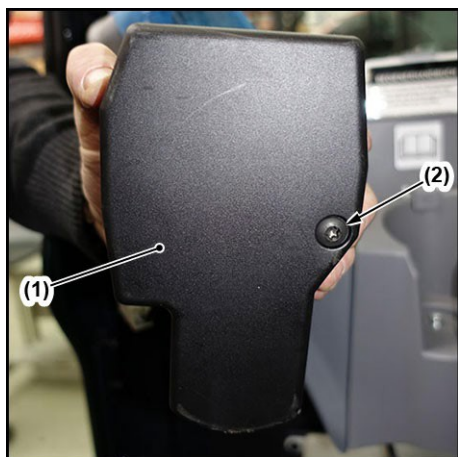
- (1) Wiper motor
(2) Connector



8. Remove the bolt (1) that connects the cover (2) to the wiper motor.

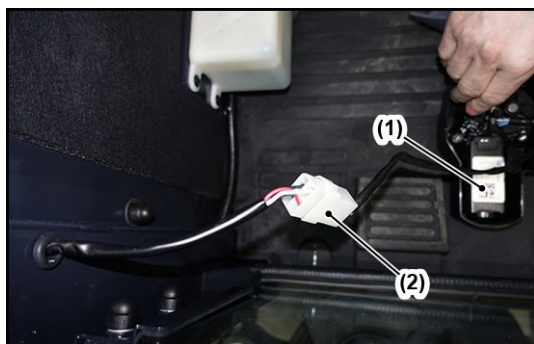
- (1) Bolt (M6)
(2) Cover

2. Installation of the new wiper motor



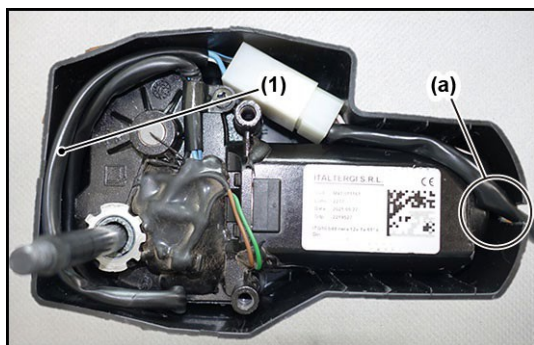
1. Assemble the new cover (1) with the bolt (2) to the new wiper motor.

- (1) Cover (RH418-4673-2)
- (2) Bolt (M6)



2. Connect the connector of the wiper motor (1) to the cabin connector (2).

- (1) Wiper motor (Kit REF No. 7)
- (2) Cabin connector

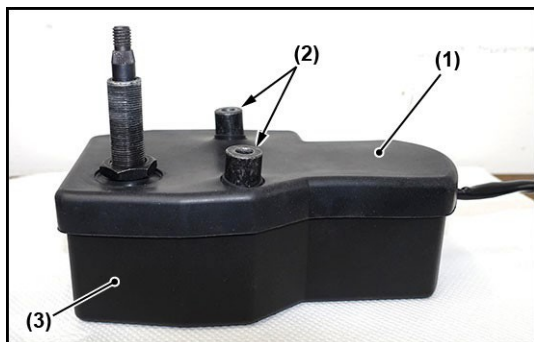


3. Route the cable (1) as shown in the picture.

■ **IMPORTANT**

- Route the cable trough the recess (a) .

- (1) Cable
- (a) Recess

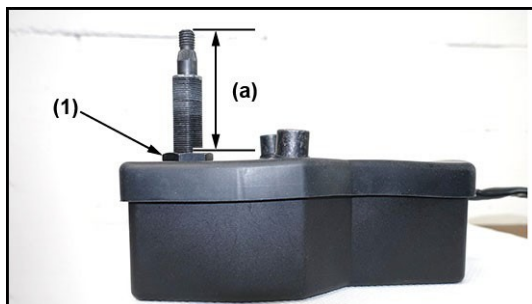


4. Attach the front cover (1) with the bushings (2) onto the cover (3).

■ **IMPORTANT**

- Push the bushings (2) from the inner side through the front cover (1) to ensure a tight seal.

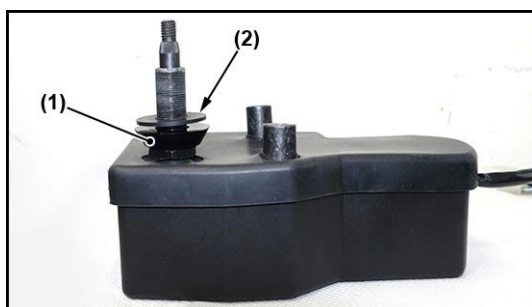
- (1) Front cover (RH418-4674-0)
- (2) Bushing x2
- (3) Cover (RH418-4673-2)



5. Put the nut (1) onto the wiper motor shaft.
Adjust the distance (a) from the nut (1) to the top of the shaft.

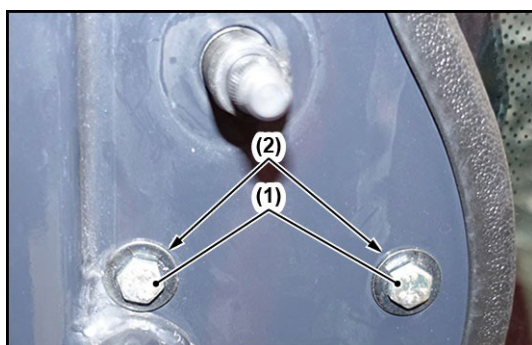
Distance	(a)	58.7 mm
		2.3 in

- (1) Nut (Kit REF No.3)



6. Put the distancer (1) and the flat seal (2) onto the wiper motor shaft.

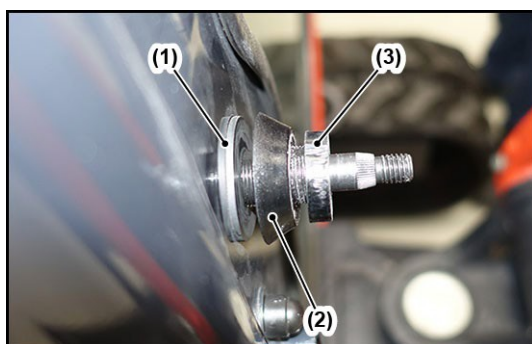
- (1) Distancer (Kit REF No. 1)
(2) Flat seal (Kit REF No. 2)



7. Install the wiper motor with the washers (1) and the bolts (2) to the cabin.

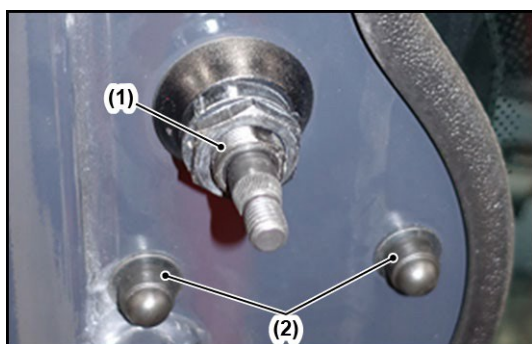
Tightening Torque	Bolt (1)	8 - 10 N·m
		5.9 - 7.4 lbf·ft

- (1) Bolt x2
(2) Washer x2



8. Install the flat seal (1), the distancer (2), and the bushing (distance) (3).

- (1) Flat seal (Kit REF No. 2)
(2) Distancer (Kit REF No. 1)
(3) Bushing (distance)



9. Secure the wiper shaft with the nut (1) and install the caps (2).

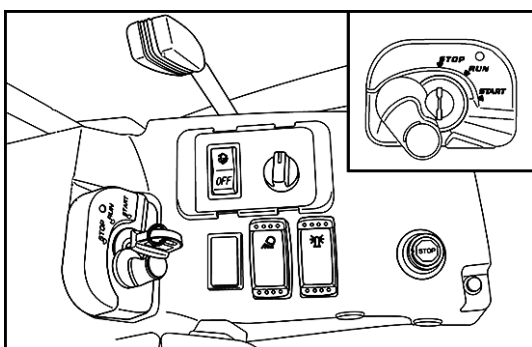
Tightening Torque	Nut (1)	8 - 10 N·m
		5.9 - 7.4 lbf·ft

- (1) Nut (Kit REF No. 3)
(2) Cap x2



10. Install the cap (1).

(1) Cap (Kit REF No. 4)

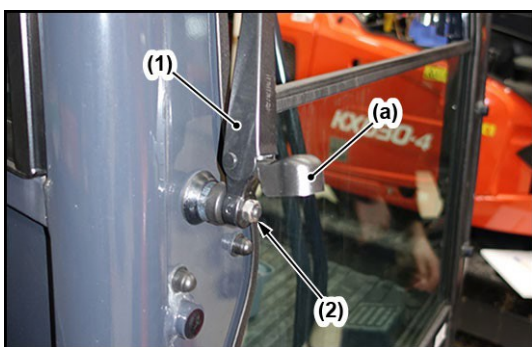


11. Turn the starter key to run. The wiper motor will actuate when it is not in its initial position. Turn the starter key to stop when the wiper motor is in its initial position.



12. Attach the wiper arm (1) to the shaft of the wiper motor. Align the wiper blade parallel to the cabin frame.

(1) Wiper arm

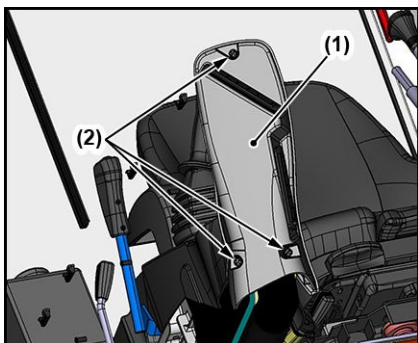


13. Secure the wiper arm (1) with the nut (wiper) (2) and close the cover (a).

Tightening Torque	Nut (wiper) (2)	13 - 17 N·m
		9.6 - 12.5 lbs·ft

(1) Wiper arm
(2) Nut(wiper) (Kit REF No. 6)
(a) Cover

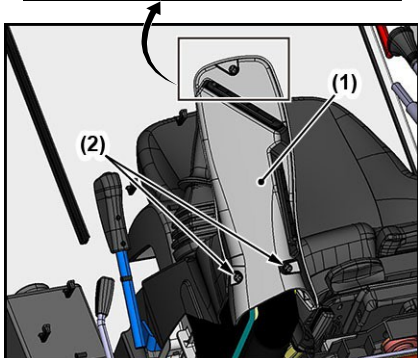
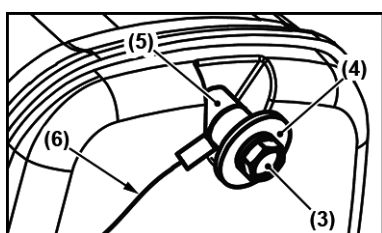
For Non EU machines



14. Install the cover (1) with the screws (2).

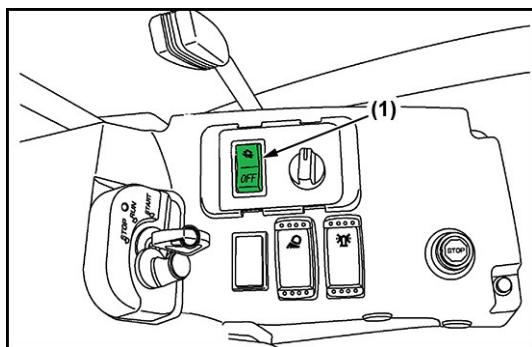
- (1) Cover
- (2) Screw x3

For EU machines



14. Install the cover (1) with the screws (2). Screw in the bolt (3) together with the washer (4), the collar (5), and the rope (6) as shown in the illustration.

- (1) Cover (Meter, 2)
- (2) Screw x2
- (3) Bolt M6x30
- (4) Washer
- (5) Collar
- (6) Rope



15. Check the wiper motor for correct operation by briefly actuating the wiper motor switch (1).

- (1) Wiper motor switch