

INSTALLATION MANUAL

REF NO. BA04017

DATE August 5, 2004

(C)

Page 1 of 8

SUBJECT: INSTALLATION PROCEDURE OF SWITCH PUMP CUT OUT SWITCH KIT ON LISTED WHEEL LOADERS

PURPOSE: To introduce installation procedure for the switch pump normally cut-off kit.

APPLICATION: WA450-5L Wheel Loader Serial Number A36001 and UP
WA480-5L Wheel Loader Serial Number A37001 and UP

FAILURE CODE: J100MB

DESCRIPTION: As a new option, a switch kit installation is released to keep the switch pump cut-out when it would normally be "ON" has been made available for use on the listed wheel loaders (Sales Code: 6WF85) Thanks to this function, the machine load torque can be reduced to provide more margin to the engine torque and the following effects can be expected:

- Improved response of the engine on high altitude areas where the low revolution rate torque of the engine drops
- Improved uphill traveling performance on work sites where it is necessary to raise the boom while the machine is making an uphill traveling in order to dump material into the hopper
- Improved fuel consumption by reduction of the work equipment load

However, this kit is not suitable when higher work equipment speed is necessary like in a loading work on a narrow place.

MACHINE PREPARATION

1. Park the machine on a flat level surface; lower the work equipment to the ground. Shut off the engine and cycle the controls to remove any residual hydraulic pressure from the work equipment circuits. Turn the parking brake switch on and block the tires or tracks if necessary.
2. Remove the key from the ignition switch until the repairs are complete. Place a tag on the steering controls advising: "This machine is being repaired. It should not be started or moved for any reason until the tag is removed by the person doing the repairs."



WARNING! Observe all safety and precautionary standards as dictated by the environment and work conditions under which the equipment will be inspected, reworked and repaired. consult the "Shop Manual" and "Operator's and Maintenance Manual" and your "Komatsu district service manager" with any/all questions regarding safety.

Remark

These instructions are intended to supplement the service data contained in the appropriate "Shop Manual". Always refer to that manual for Removal, Installation, Disassembly and Reassembly instructions when not contained in this document.

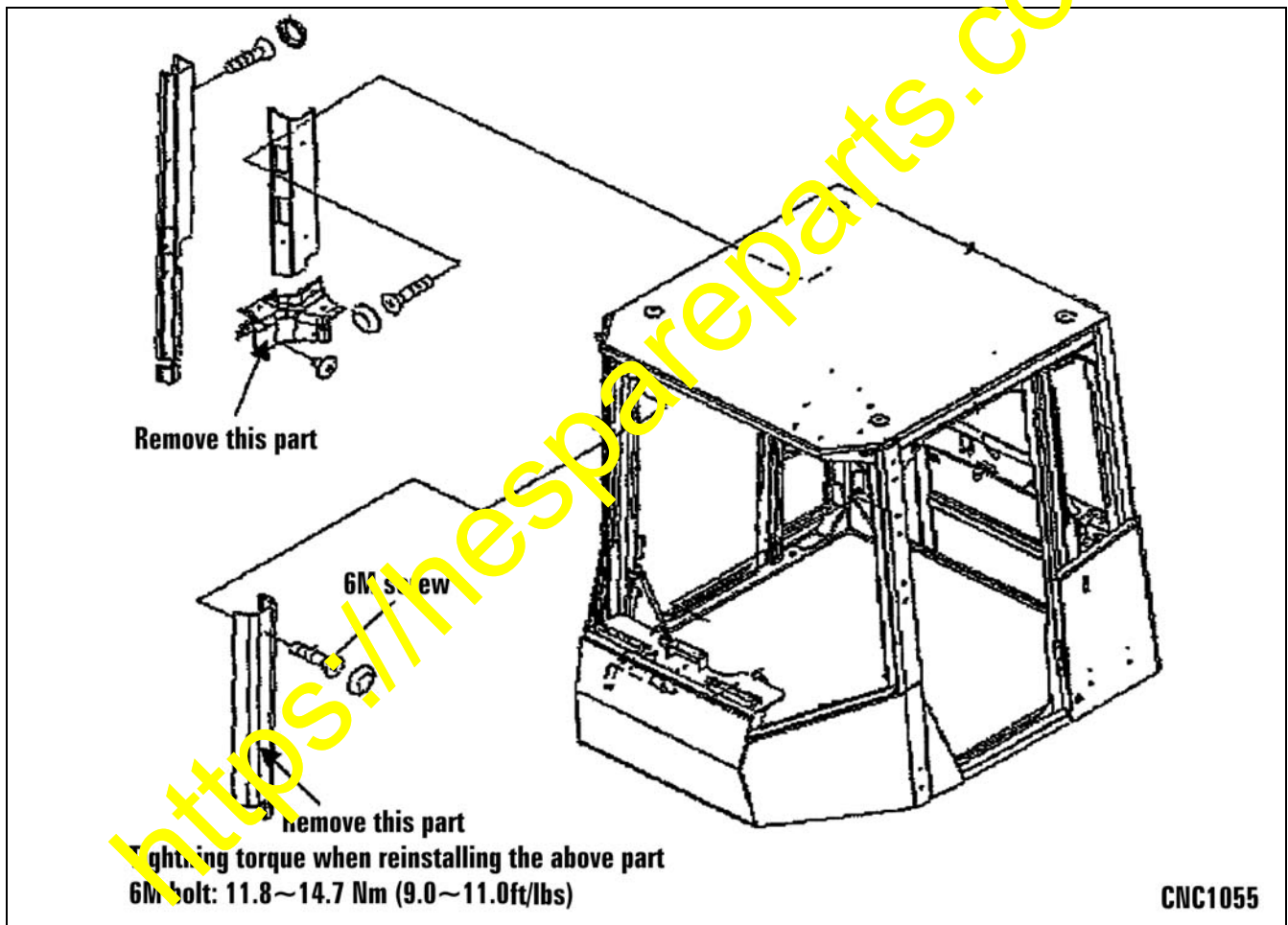
PARTS LIST

No.	Part Number	Description	Qty.	Remark
1	421-06-32580	WIRING HARNESS	1	
2	421-06-32590	WIRING HARNESS	1	
3	421-06-32570	SWITCH	1	
4	421-93-23460	PLATE	1	
5	08054-20519	BAND	5	

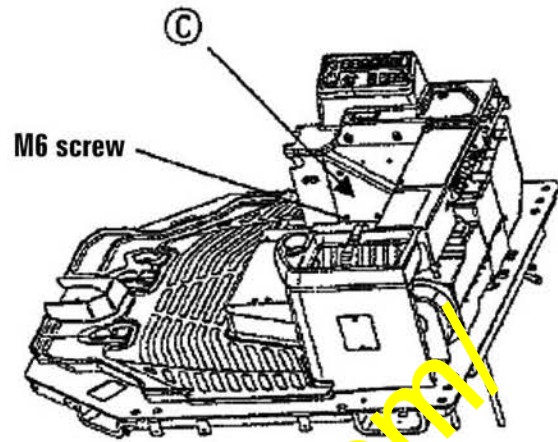
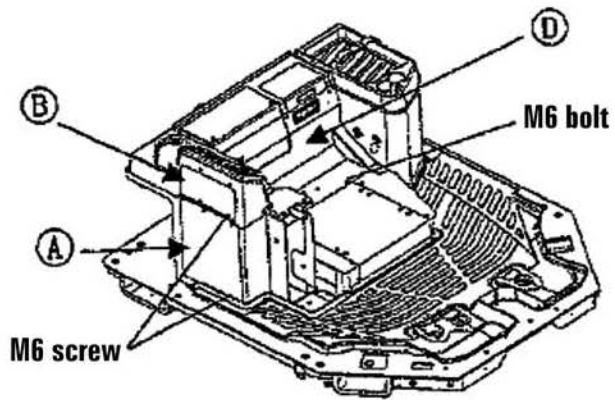
Part item No. are shown in the illustrations

DISASSEMBLY PROCEDURES

1. Turn "OFF" the ignition switch.
2. Remove the interior parts inside the operator's cab shown in the illustration below.



3. Remove the covers A, B, C and D

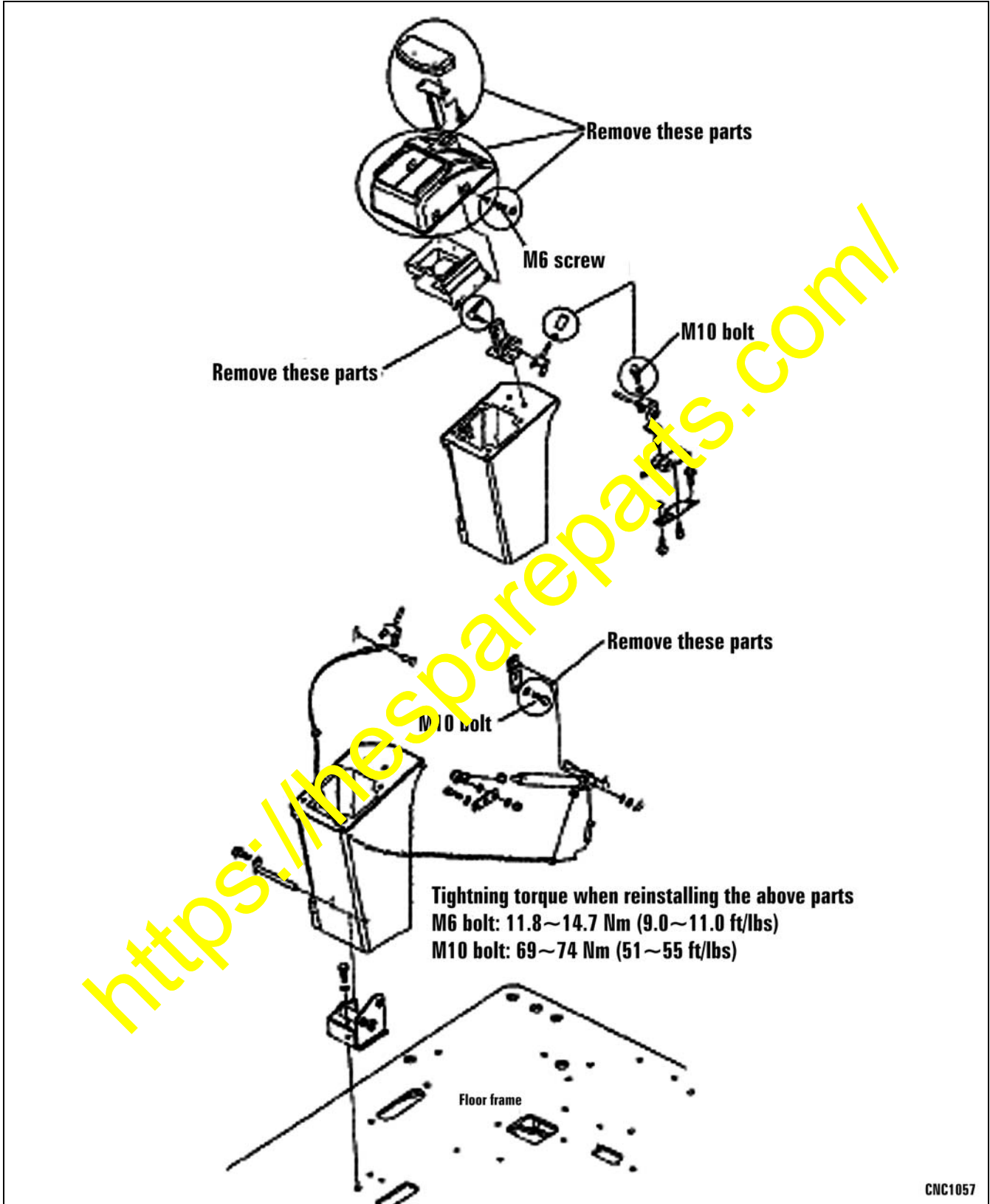


Tightning torque when reinstalling the above parts
M6 bolt: 11.8~14.7 Nm (9.0~11.0 ft/lbs)

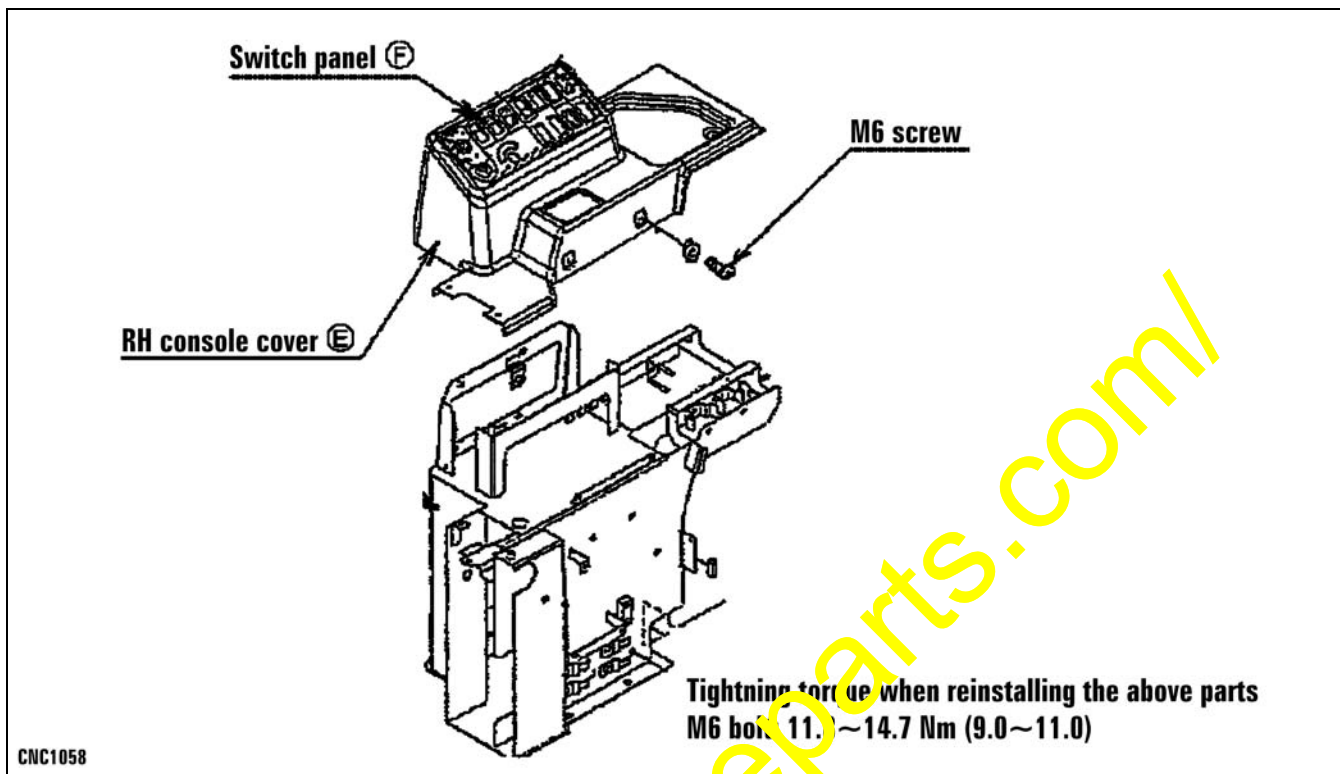
CNC1056

<https://hespareparts.com/>

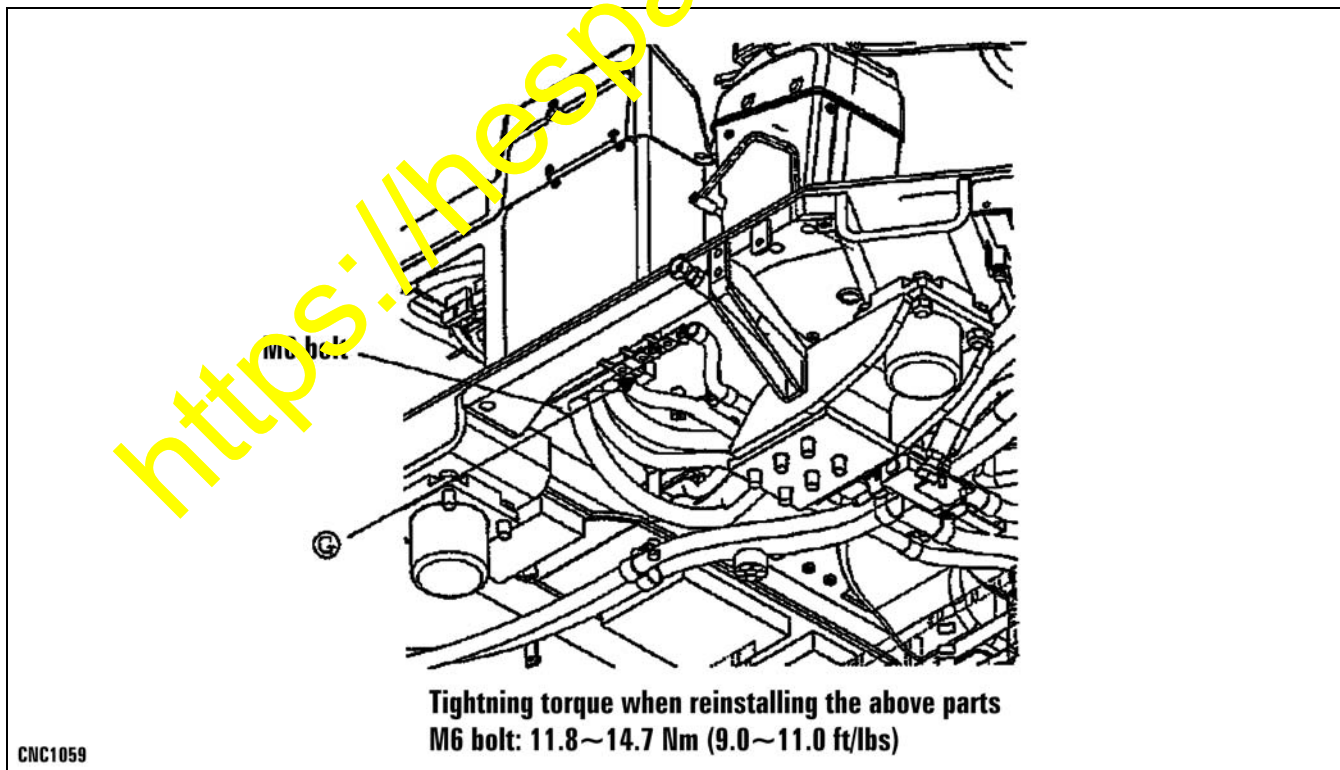
4. Remove the circled parts of the RH side work equipment lever stand, push the work equipment lever stand forward to bring it down.



5. Disconnect the connectors of respective switches, and after that, remove the RH console cover **E**. (Remove the RH console cover **E** with the switch panel **F** being installed to it.)



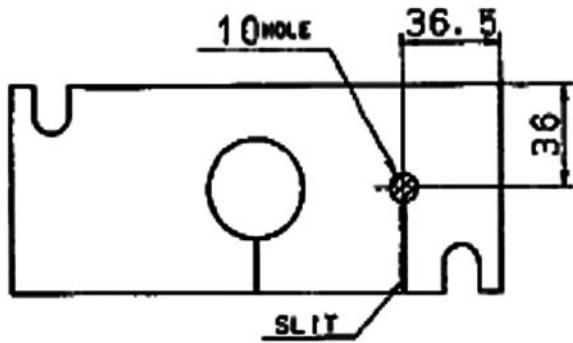
6. Remove the rubber sheet **G** being installed under the floor frame.



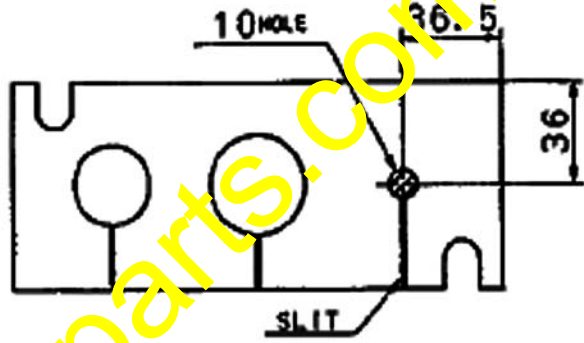
REWORK PROCEDURES

1. Add a hole in the rubber sheet G which has been removed as above. (The position of the additional hole for each specification of the machine is as per the drawing below.)

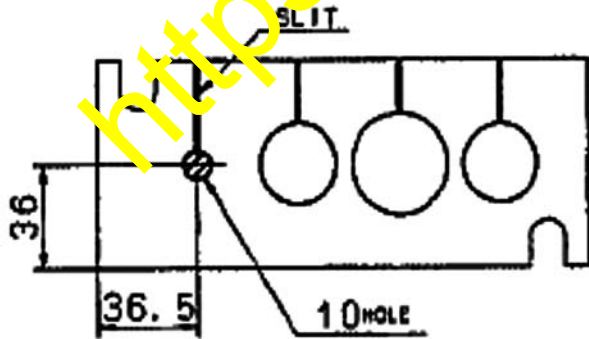
WA380/400/430-5
(Standard spec.)



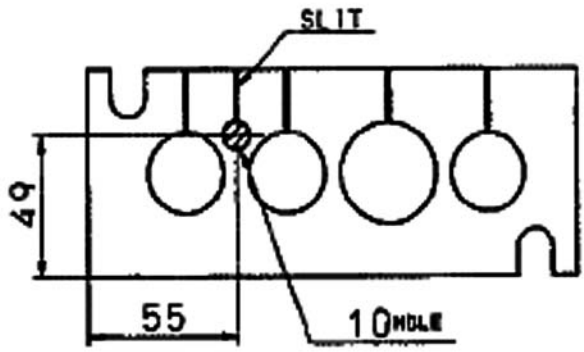
WA380/400/430-5
(Optional spec.:
EPC work equipment lever spec. or
joystick steering spec.)



WA470-5
(Standard spec.)



WA470-5
(Optional spec.:
EPC work equipment lever spec. or
joystick steering spec.)

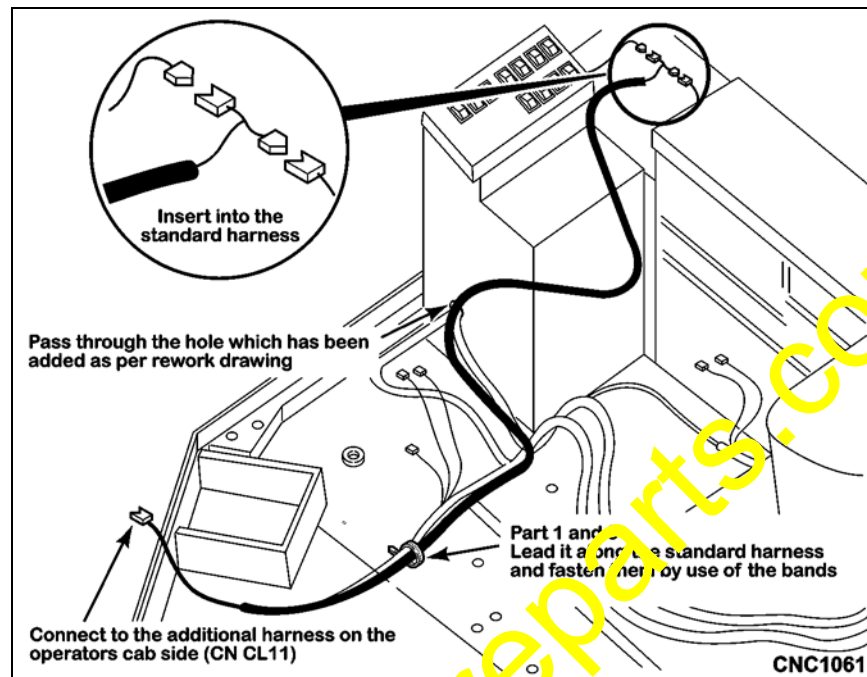


CNC1060

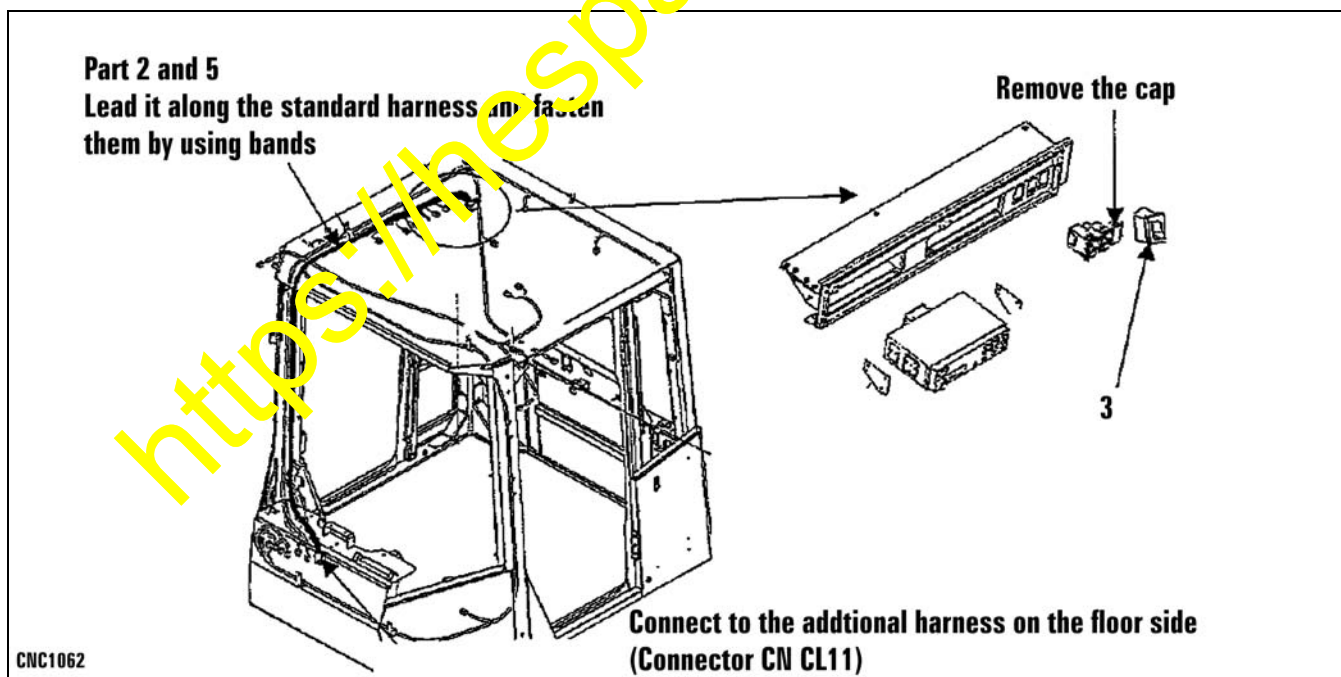
INSTALLATION PROCEDURES

1. Install the switch and harness as per the instructions given in the drawing below.

★ On the floor side



★ On cab side

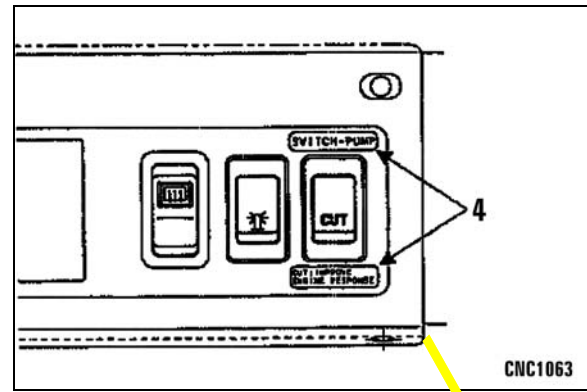


★ Stick The Decal Near The Switch.

- Precautions when sticking the decal:
 Clean the surface to remove dirt and oil.
 Do not apply the decal with oily hands or work gloves.

• Restoration of the machine

Restore the parts which have been removed as per the above Sections (2) through (6) back to their original positions in the reversed procedure to their removal procedure. When carrying out the restoration work, if the mounting buttons (23B-950-4450) for the interior parts inside the operator's cab and the work equipment lever box upper cover mounting cap (+21-09-31310) are damaged or broken, replace them with new parts.



★ Operation Checks

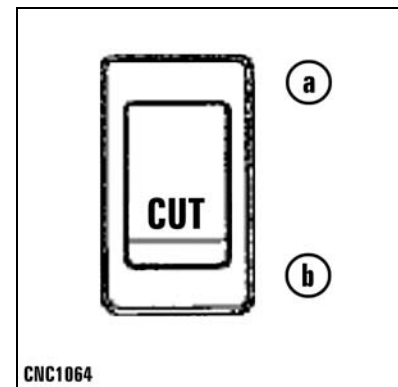
Carry out the operation checks for the switch pump normally cut-off function following the procedure described below.

Start the engine and make sufficient warming up operation.

Measure the boom raising time and confirm that the boom raising time is as follows.

Unloaded boom raising time *

	Switch Position	
	(a) (OFF)	(b) (CUT)
WA450-5L	6.0	6.1
WA470-5L	5.8	6.1



*The time needed to raise the bucket from the ground level to the top end position under Hi-Idling revolution of the engine