CEBM005002

Shop Manual

KOMATSU®

avance® plus

WA180-3MC

WHEEL LOADER

SERIAL NUMBERS **WA180-3MC - A81001** and UP

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METHOD OF USING ENGINE RELATED CHARTS

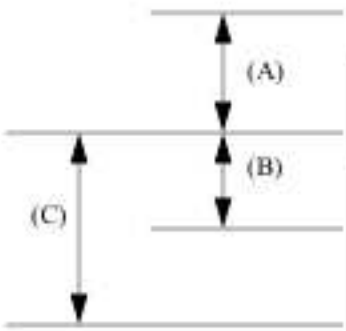
Using troubleshooting charts for engine-related failure

This troubleshooting chart is divided into three sections:
questions, check items, and troubleshooting.
The questions and check items are used to pinpoint high probability causes that can be located from the failure symptoms or simple inspection without using troubleshooting tools.
Next, troubleshooting tools or direct inspection are used to check the high probability causes to make final confirmation.

[Questions]
Sections (A) + (B) in the chart on the right corresponds to the items where answers can be obtained from the user. The items in (B) are items that can be obtained from the user, depending on the user' level.

[Check items]
The serviceman carries out simple inspection to narrow down the causes. The items under (C) in the chart on the right correspond to this.
The service man narrows down the causes from information (A) that he has obtained from the user and the results of (C) that he has obtained from his own inspection.

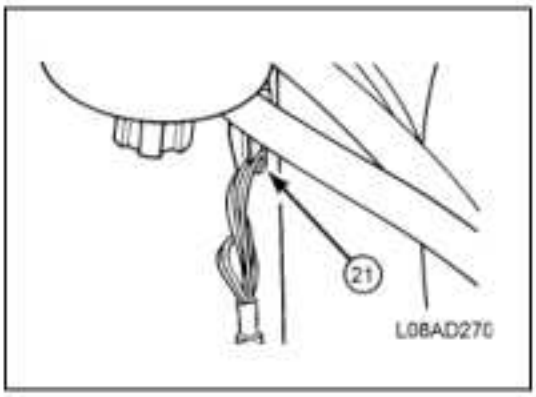
[Troubleshooting]
Troubleshooting is carried out in order of probability, starting with the causes that have been marked with having the highest probability from information gained from **[Questions]** and **[Check items]**



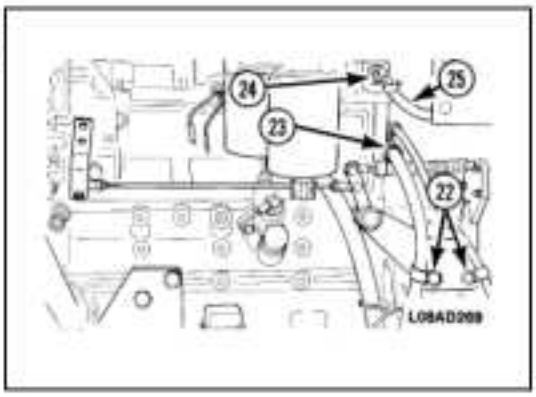
		Causes (1)	(2)	(3)
Questions	(a)	◎		
	(b)			◎
	(c)		◎	
Check items	(d)	O		
	(e)			O
Trouble-shooting	i	●		
	ii		●	
	iii			●

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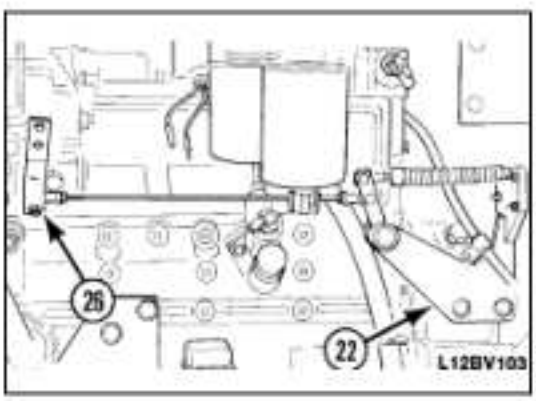
E. Unclip engine harness from floor harness (21).



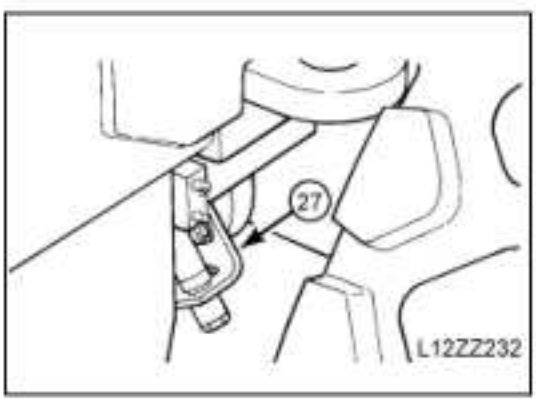
F. Unclip harness and cranking motor cable at throttle bracket (22) at rear of engine (23), and shut off petcock (24), and disconnect heater hose (25).



G. Disconnect throttle linkage rod at fuel pump lever (26), remove throttle bracket (22) and position assembly out of way.



H. Remove remote engine oil drain bracket (27) from trunnion.



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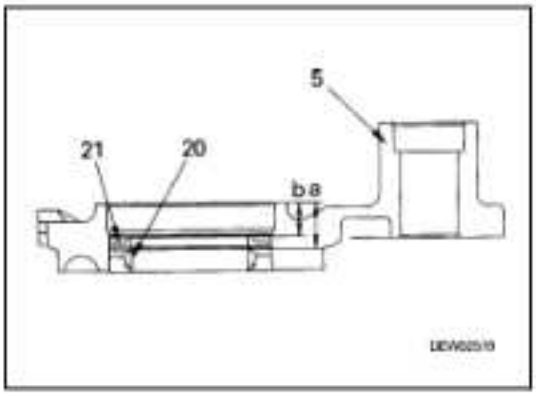
ASSEMBLY OF PARKING BRAKE

1. Housing

A. Press fit oil seal (20) and dust seal (21) to housing (5).
Press-fitting dimension "**a**": 25.8 ± 1.0 mm
Press-fitting dimension "**b**": 18.3 ± 1.0 mm

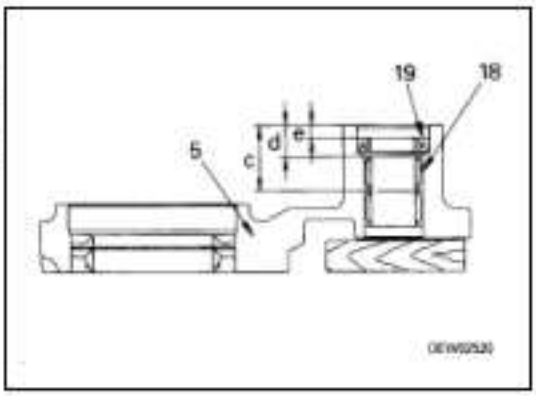
Lip of oil seal: Grease (G2-LI)

★ Coat with grease when assembling the housing.



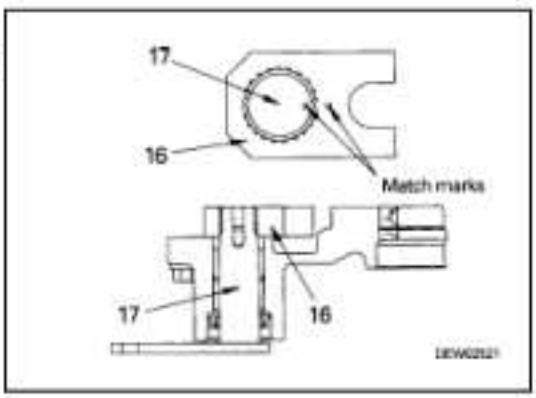
B. Press fit needle bearing (18) and oil seal (19) to housing (5) to specified dimensions.
Needle bearing press-fitting dimension "**c**": 38.5 ± 0.15 mm (1st).
Needle bearing press-fitting dimension "**d**": 18.0 ± 0.5 mm (2nd).
Oil seal press-fitting dimension "**e**": 7.5 ± 0.3 mm.

Lip of oil seal: Grease (G2-LI)



C. Insert outside lever (17) from oil seal end.
★ Clean and remove all oil and grease from the bolt hole of the outside lever.

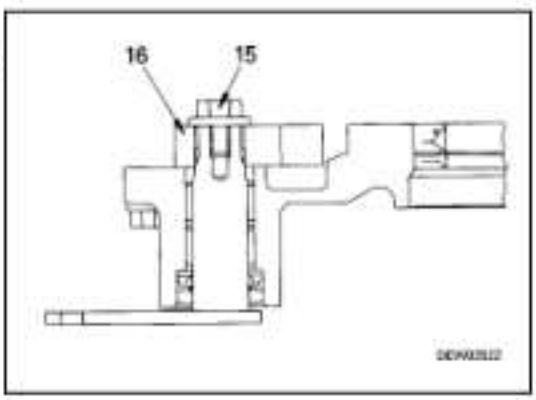
D. Align with match mark and assemble inside lever (16).



E. Tighten lock bolt (15).
★ Clean and remove all oil and grease from lock bolt and bolt hole.
★ Be sure to assemble the washer.

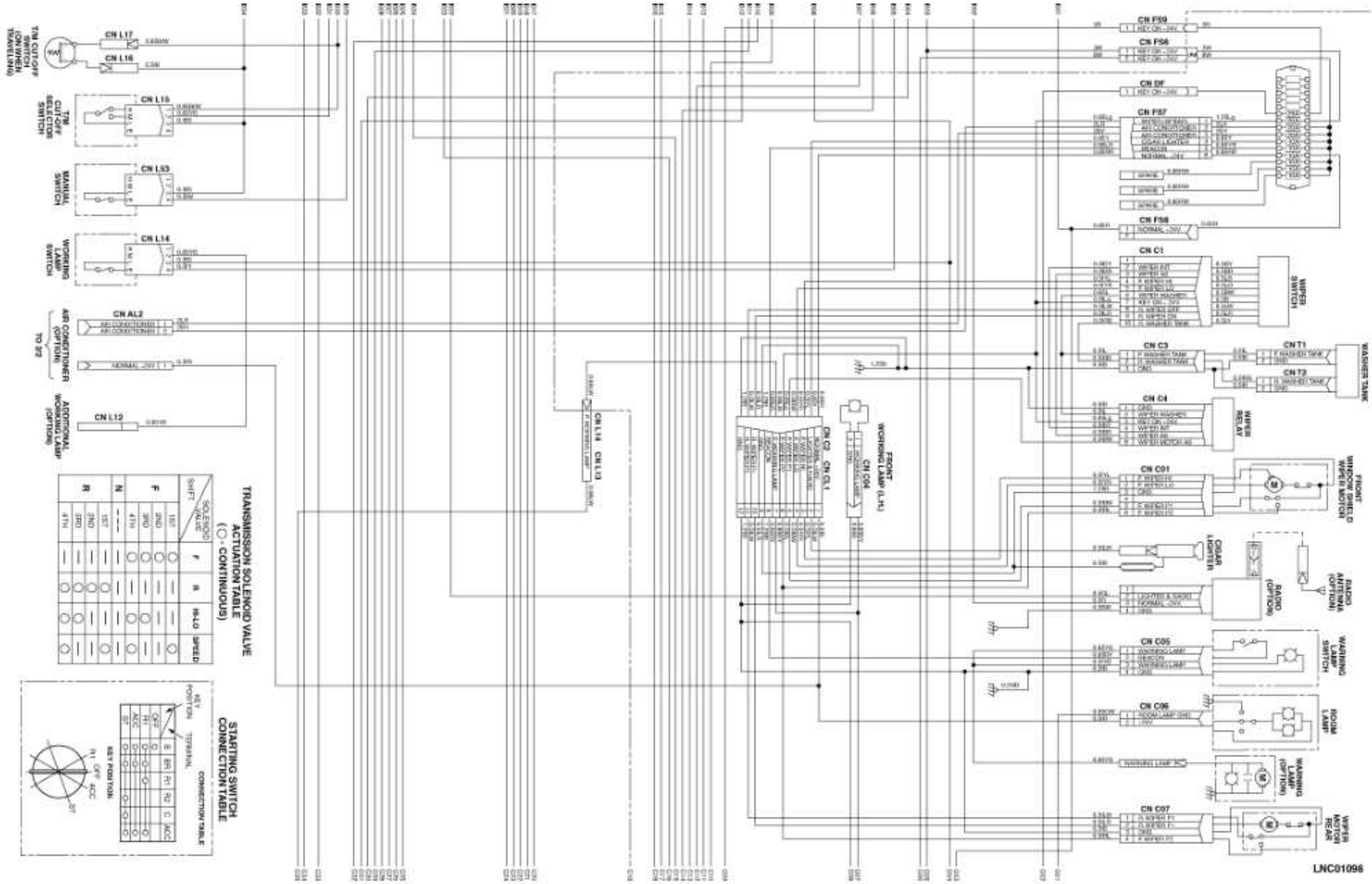
Lock bolt: Thread tightener (LT-2)

Lock bolt: 30.9 ± 3.4 Nm (22.8 ± 2.5 lbf ft)



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ELECTRICAL WIRING DIAGRAM (3/5)



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