CEBM003402

SHOP MANUAL

KOMATSU®

WA380-3MC

WHEEL LOADER

MACHINE MODEL	SERIAL NUMBERS
WA380-3MC	A51001 and up

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TROUBLESHOOTING

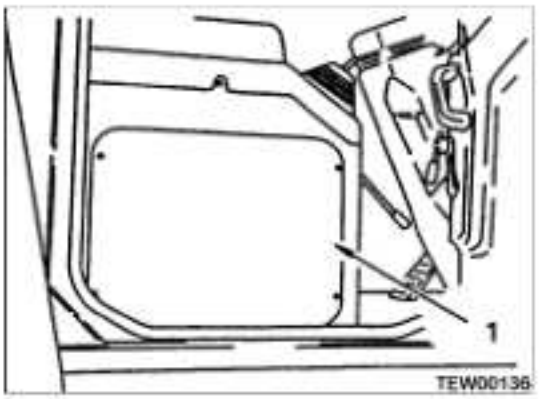
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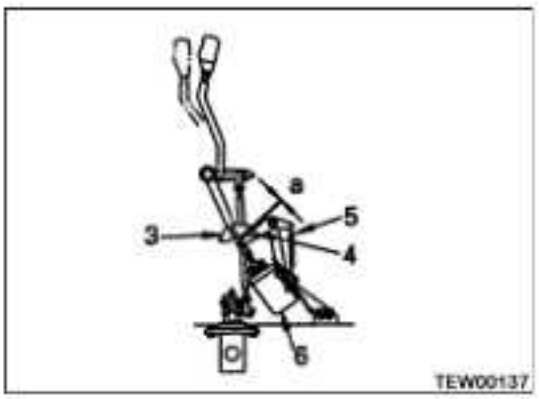
Adjusting

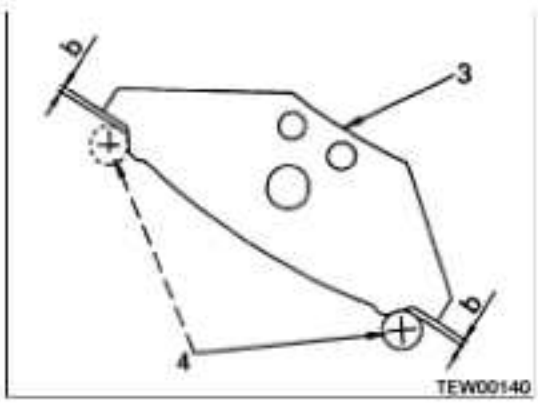
1. Remove cover (1).

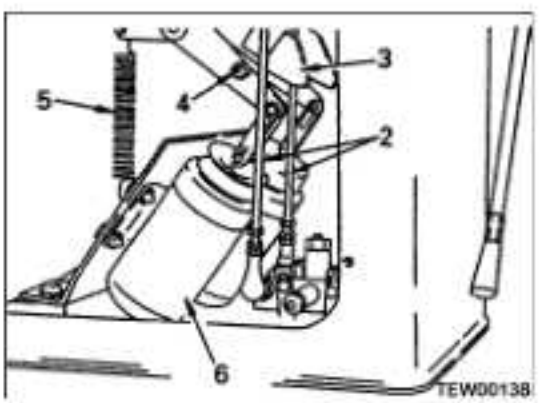
2. With solenoid (6) pulled, fix the solenoid in position so that the clearance between cam (3) and roller (4) is dimension **a**.
   Dimension **a**: 0 - 0.5 mm
   Set the bucket lever and boom lever at the **HOLD** position.
   If cam (3), roller (4), or spring (5) are broken, replace them before adjusting.



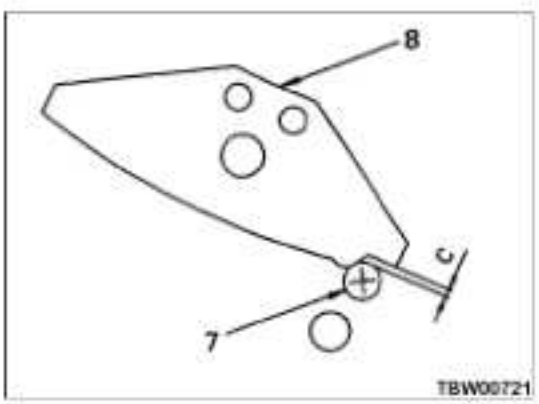
3. **Boom lever**
   Operate the boom lever and adjust the length of rod (2) so that roller (4) is dimension **b** at the notch at both ends of cam (3).
   Dimension **b**: 0 - 1 mm







4. **Bucket lever**
   Operate the lift lever and adjust the length of rod (2) so that roller (7) is dimension **C** at the notch at both ends of cam (8).
   Dimension **C**: 0 - 1 mm



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S-2 Engine does not start

1) Engine does not turn

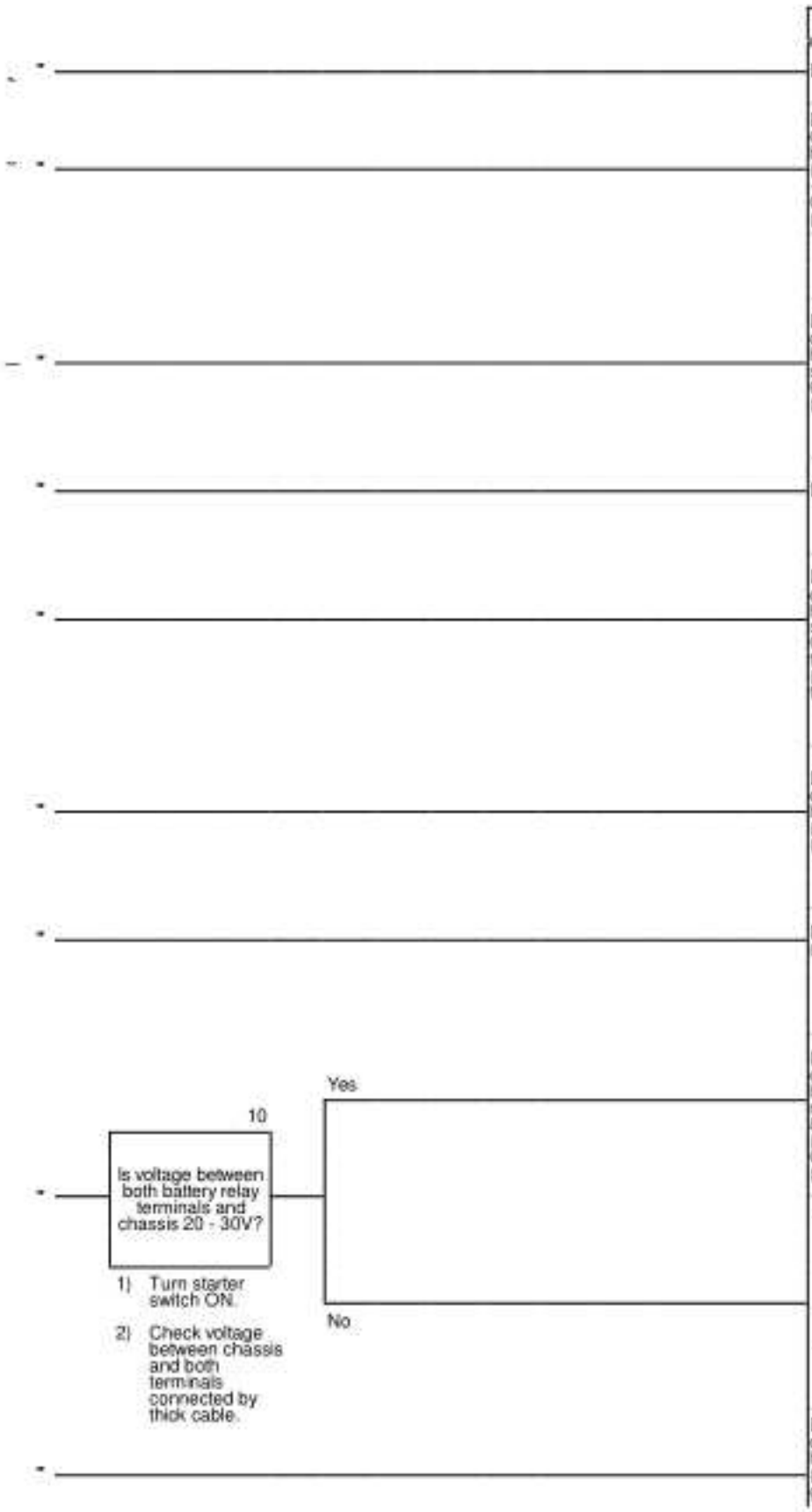
General causes why engine does not turn

- Internal parts of engine seized
- If internal parts of the engine are seized, carry out troubleshooting for "**S-4 Engine stops during operations**."
- Failure in power train
- Defective electrical system

Legend
○: Possible causes (judging from Questions and check items)
◎: Most probable causes (judging from Questions and check items)
△: Possible causes due to length of use (used for a long period)
Items to confirm the cause

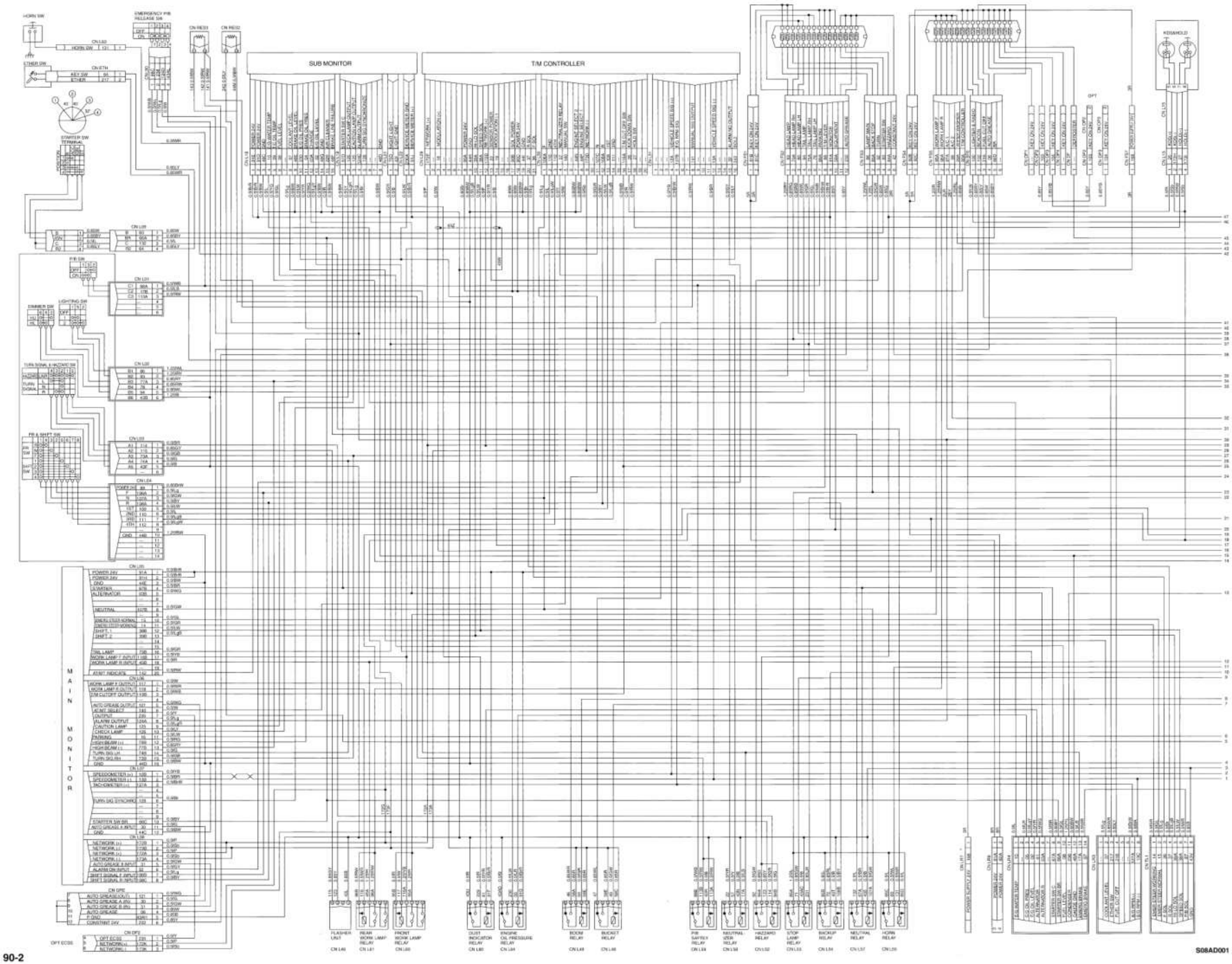
			Causes									
			Defective wiring of starting circuit	Defective or deteriorated battery	Defective starter motor	Broken ring gear	Defective safety relay or safety	Defective battery relay	Defective battery terminal	Defective engine fuel cut solenoid	Defective starter switch
Questions	Confirm recent repair history										
	Degree of use	Operated for long period of time		△		△					
	Condition of horn when starting switch is ON	Horn does not sound	○								
		Horn sound level is low		◎							
Check items	When starting switch is turn to START, pinion moves out, but	Rotating speed is slow		◎							
		Makes grating noise			○	○					
		Soon disengages again					○				
		Makes rattling noise and does not turn		○	○		○				
	When starting switch is turned to START, pinion does move out		○	○							
	When starting switch is turned to ON, there is no clicking sound			○				○			
	Battery terminal is loose								○		
	When battery switch is turn to ON, solenoid does not move									○	
	When battery is checked, battery electrolyte is found to be low			◎							
Troubleshooting	Specific gravity of electrolyte, voltage of batter is low		Carry out troubleshooting for defective wiring of starting circuit								
	For the following conditions 1) - 5, turn the starting switch OFF, connect the cord, and carry out troubleshooting at ON										
	1)	When terminal **B** and terminal **C** of starting switch are connected, engine starts									
	2)	When terminal **B** and terminal **C** of starting motor are connected, engine starts									
	3)	When terminal **B** and terminal **C** of safety relay are connected, engine starts									
	4)	When terminal of safety switch and terminal **B** of starting motor are connected, engine starts									
	5)	there is no 24V voltage between battery relay terminal **B** and terminal **E**									
	When ring gear is inspected directly, tooth surface is found to be chipped										
		Remedy	-	Replace	Replace	Replace	Replace	Replace	Replace	Replace	Replace

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Cause	Remedy
Defective neutral relay	Replace
Defective contact, or disconnection in wire harness between CNL57 (female) (3) - CNLR4 (8) - CNR01, 02 (diode) - CNER1 (10) - CNE13 (female) (1)	After inspection, repair or replace
Defective contact, or disconnection in wire harness between starter switch terminal **C** - CNL09 (3) - CNL57 (female (5)	After inspection, repair or replace
Defective starter switch	Replace
Defective contact, or disconnection in wire harness between starter switch terminal **B** - CNL09 (1) - CNFS3 (4) - fuse CNFS3 (6) - CNLR5 (1) - CNR17 - slow blow fuse 30A - battery relay	After inspection, repair or replace
Defective contact, or disconnection in wire harness between CNL04 (female) (3) - CNL57 (female) (1)	After inspection, repair or replace
Defective directional lever switch	Replace
Defective contact, or disconnection in wire harness between battery relay and slow blow fuse 80A - CNR15 - CNLR6 (1) - CNFS1 (2) fuse - CNFS2 (8) - CNL04 (female) (1)	After inspection, repair or replace
! If answer is No for both terminals: Defective contact or disconnection in wiring harness between battery and battery relay ! If answer is No for one terminal: Defective battery relay	After inspection, repair or replace
Defective contact, or disconnection in wire harness between CNL57 (female) (2) and chassis ground	After inspection, repair or replace

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