CEBM007801

Shop Manual

KOMATSU®

HM350-2

ARTICULATED DUMP TRUCK

SERIAL NUMBERS **HM350-2 A11001 and up**

ENGINE **SAA6D140E-5**

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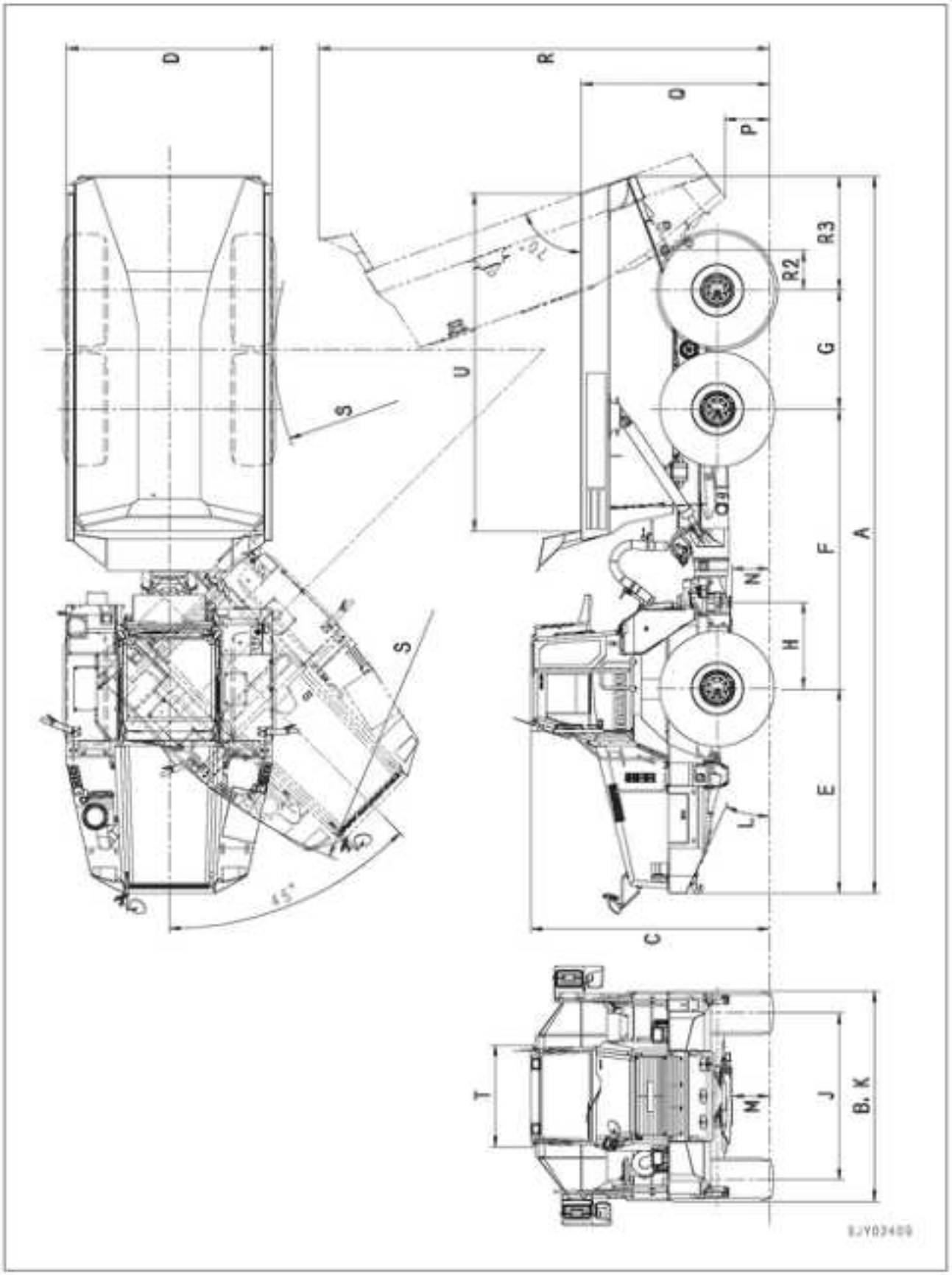
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Specification drawings



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Failure code [CA731] Phase error in engine Bkup speed sensor

Action code	Failure code	Trouble	Phase error in engine Bkup speed sensor (Engine controller system)
E03	**CA731**		
Contents of trouble	• Engine Bkup sensor circuit detected abnormality in phase.		
Action of controller	• Controls with signal of engine speed sensor.		
Problem that appears on machine	• Engine stops after it has been running (when Bkup speed sensor also has malfunction). • Engine cannot be started after it has been stopped (when speed sensor also has malfunction).		
Related information			

Possible causes and standard value in normal state	Cause		Standard value in normal state/Remarks on troubleshooting
	1	Defective engine speed sensor system	Engine speed sensor may be defective. Perform troubleshooting for failure code [**CA689**].
	2	Defective engine Bkup speed sensor system	Engine Bkup speed sensor may be defective. Perform troubleshooting for failure code [**CA778**].

Failure code [CA757] Loss of all data in engine controller

Action code	Failure code	Trouble	Loss of all data in engine controller (Engine controller system)
E03	**CA757**		
Contents of trouble	• All data in engine controller are lost.		
Action of controller	• None in particular.		
Problem that appears on machine	• Engine operates normally but may stop or may not be able to restart.		
Related information			

Possible causes and standard value in normal state	Cause	Standard value in normal state/Remarks on troubleshooting
	Perform troubleshooting for failure code [**CA111**].	

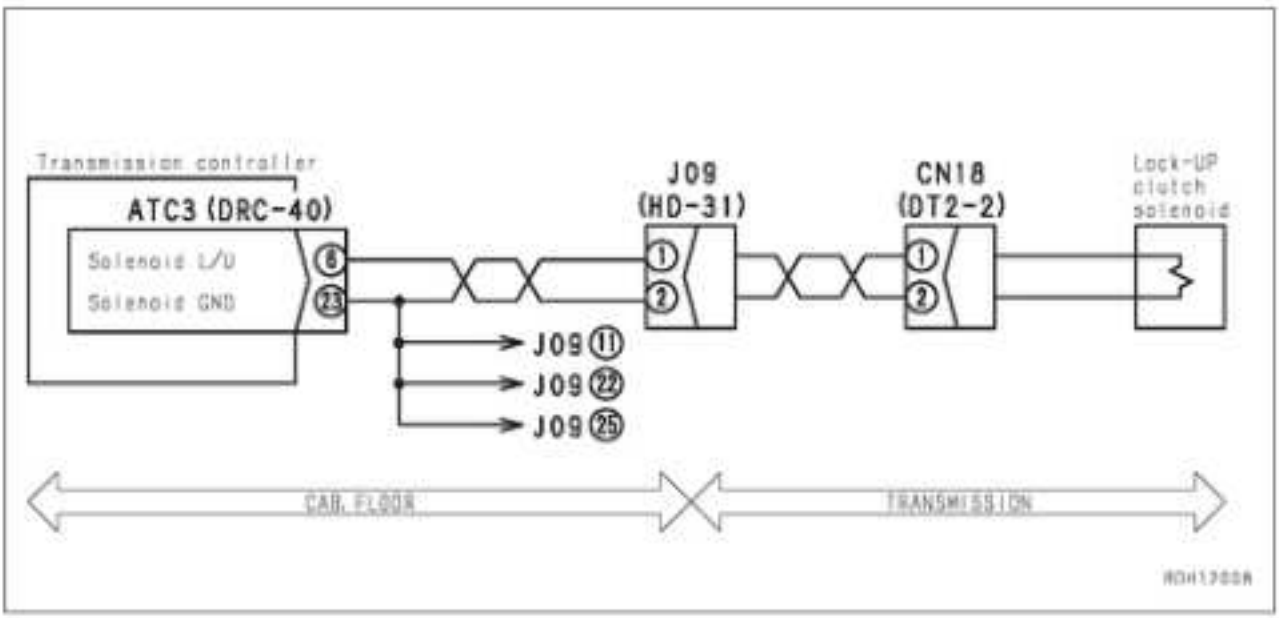
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Failure code [DXH1KY] Hot short in output circuit of lockup clutch solenoid

Action code	Failure code	Trouble	Hot short in output circuit of lockup clutch solenoid (Transmission controller system)
E03	DXH1KY		
Contents of trouble	• When output to lockup clutch solenoid is turned OFF, some current flows.		
Action of controller	• Keeps current gear speed and turns lockup system OFF.		
Problem that appears on machine	• Gear cannot be shifted. • Lockup system is kept OFF. • If gearshift lever is set in N, machine cannot restart until it stops.		
Related information	• Output current to lockup solenoid can be checked with monitoring function. (Monitoring code: TRANSMISSION - ECMV LU DIR - 31609) • Method of reproducing failure code: Turn starting switch ON.		

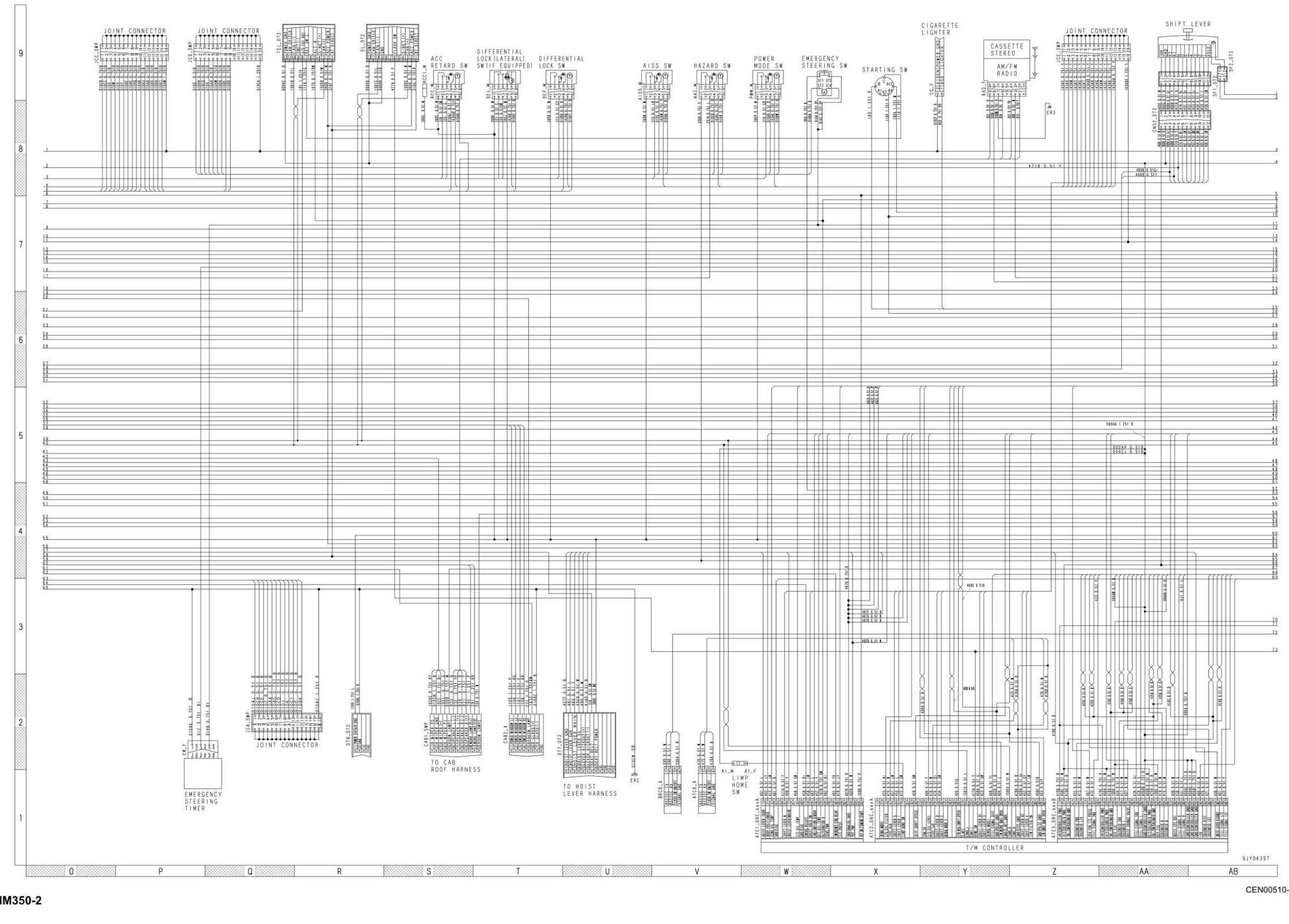
	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Hot short (Short circuit with 24V circuit) in wiring harness	★ Prepare with starting switch OFF, then turn starting switch ON and perform troubleshooting.		
			Wiring harness between ATC3 (female) (6) – CN18 (female) (1)	Voltage	Max. 1 V
	2	Defective transmission controller	★ Prepare with starting switch OFF, then perform troubleshooting without turning starting switch ON.		
			ATC3 (female)	Resistance	
			Between (6) – (23)	5 – 15 Ω	
			Between (6), (23) – chassis ground	Min. 1 MΩ	

Circuit diagram related to lockup clutch solenoid valve



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Electrical circuit diagram for inside cab (2/4) Serial No.: New Design
HM350-2



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