SHOP MANUAL

KOMATSU®

WA430-6 (KOHAG SPEC.)

Machine model	Serial number
WA430-6	**H50051 and up**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

- WA430-6 mount the SAA6DE114-2 engine.

Notes: CETC-2 informed to KGS on May 18 that EPC control lever was abolished for KOHAG specification.
Therefore could you please remove the related items when issuing this manual.

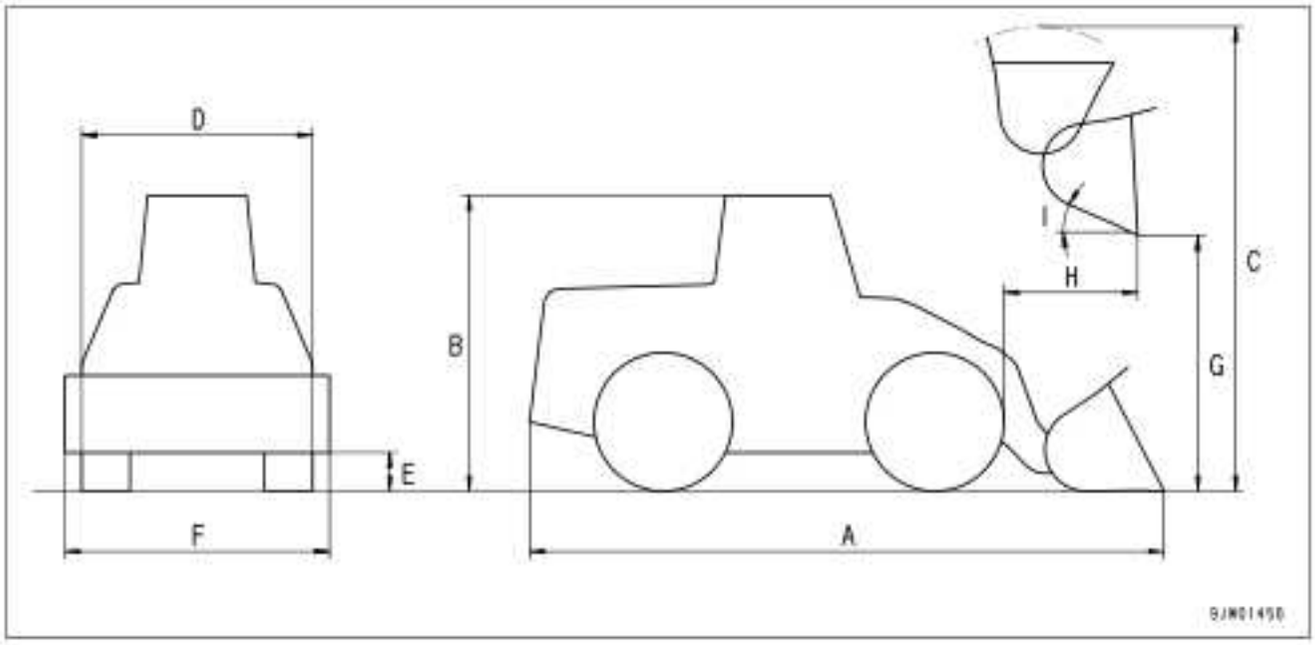
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Specification dimension drawing



	Item			Unit	WA430-6 (In P-mode)
	Machine weight			kg	19,000
	Normal load			kN (kg)	55.0 (5,600)
	Bucket capacity			m^3	3.3
	Engine model name			–	Komatsu SAA6D114-2 Diesel engine
	Engine rated output (NET)			kW {HP} /rpm	173 {232} /2,000
A	Overall length			mm	8,521
B	Overall height			mm	3,380
C	Bucket lifting height			mm	5,597
D	Overall width			mm	2,770
E	Minimum ground clearance			mm	455
F	Bucket width			mm	2,990
G	Dumping clearance	Bucket tip/BOC tip		mm	3,105/3,015
H	Dumping reach	Bucket tip/BOC tip		mm	1,105/1,150
I	Dumping angle			deg.	48
	Min. turning radius	Bucket tip/BOC tip		mm	6,575/6,610
		Center of outside tire		mm	6,035
	Travel speed	Forward	1st	km/h	7.0
			2nd	km/h	12.3
			3rd	km/h	21.6
			4th	km/h	37.2
		Reverse	1st	km/h	7.6
			2nd	km/h	12.9
			3rd	km/h	23.0
			4th	km/h	39.4

★ BOC: Abbreviation for Bolt-On Cutting edge

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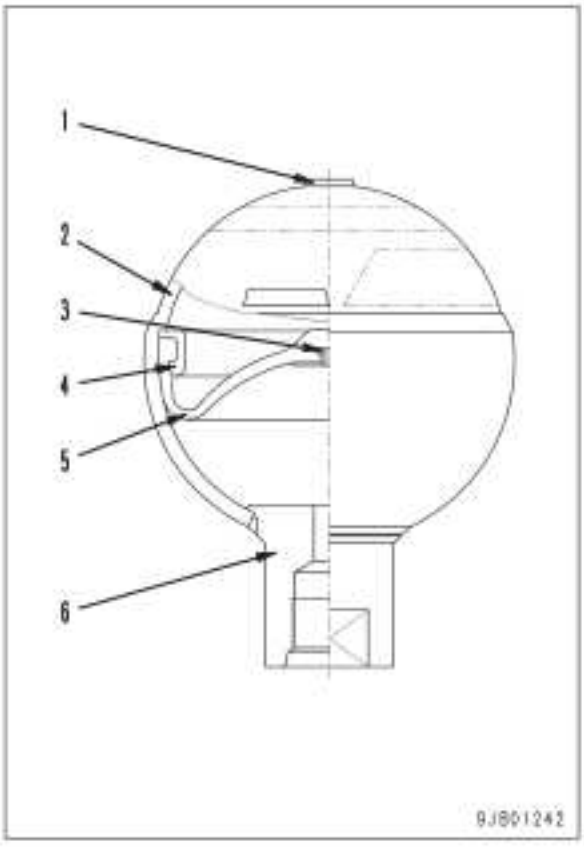
Specifications

Machine model name			WA430-6	
Serial No.			H50051 and up	
Weight	Machine weight	kg	19,000	
	Machine weight (Front wheel) in SAE travel posture	kg	9,220	
	Machine weight (Rear wheel) in SAE travel posture	kg	9,780	
Perfor-mance	Bucket capacity (Heaped)	m^3	3.3	
	Normal load	kN {kg}	55.0 {5,600}	
			N-mode	P-mode
	Travel speed (Forward 1st)	km/h	5.8	7.0
	(Forward 2nd)		10.2	12.3
	(Forward 3rd)		18.1	21.6
	(Forward 4th)		30.0	37.2
	(Reverse 1st)	km/h	6.3	7.6
	(Reverse 2nd)		10.7	12.9
	(Reverse 3rd)		19.3	23.0
	(Reverse 4th)		31.8	39.4
	Max. drawbar pull (Forward)	kN {kg}	153 {15,600}	166 {16,930}
	(Reverse)		143 {14,580}	155 {15,810}
	Gradeability	deg.	25	
	Min. turning radius (Center of outside tire)	mm	6,035	
	Turning radius (Cutting edge/BOC tip) SAE travel posture	mm	6,575/6,610	
Dimen-sions	Overall length	mm	8,521	
	Overall width (Chassis)	mm	2,780	
	Bucket width	mm	2,990	
	Overall height (Cab top)	mm	3,380	
	Overall height with bucket lifted up	mm	5,597	
	Wheelbase	mm	3,300	
	Tread	mm	2,200	
	Minimum ground clearance	mm	455	
	Max. hinge pin height	mm	4,146	
	Dumping clearance (Cutting edge/BOC tip)	mm	3,100/3,015	
	Dumping reach (Cutting edge/BOC tip)	mm	1,105/1,150	
	Steering angle	deg.	38	
	Bucket tilt-back angle (Operating posture)	deg.	47	
	(Max. height)		65	
	Bucket tilt-forward angle (Max. height)	deg.	49	
	Digging depth, 10°	mm	105	

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Accumulator (for PPC circuit)



1. Gas plug
2. Shell
3. Poppet
4. Holder
5. Bladder
6. Oil port

Outline

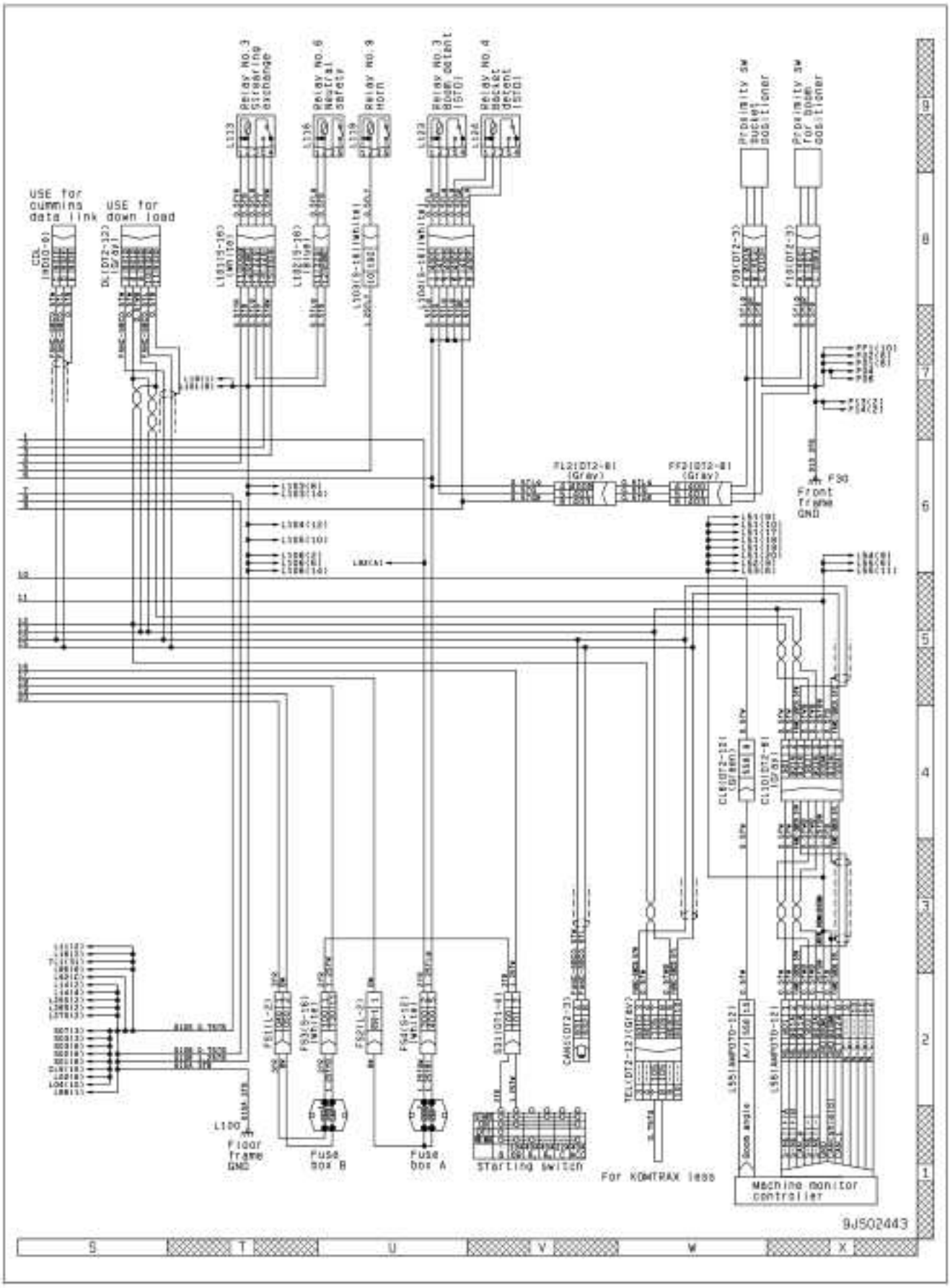
- The accumulator is installed between the charge valve and work equipment PPC valve. Even if the engine stops with the work equipment raised, the pressure of the compressed nitrogen gas in the accumulator applies the pilot oil pressure to the work equipment control valve so that the work equipment will lower by its weight.

Specifications

Gas used	: Nitrogen gas
Amount of gas	: 500 cc
Charge pressure	: 1.18 MPa {12 kg/cm²} (at 80°C)
Max. using pressure	: 6.86 MPa {70 kg/cm²}

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★ This circuit diagram is made by excerpting the work equipment controller system from the general electric circuit diagram ("Connector No. and pin No." from each branching/merging point indicate the ends of branch or source of merging within the parts of the same wiring harness).



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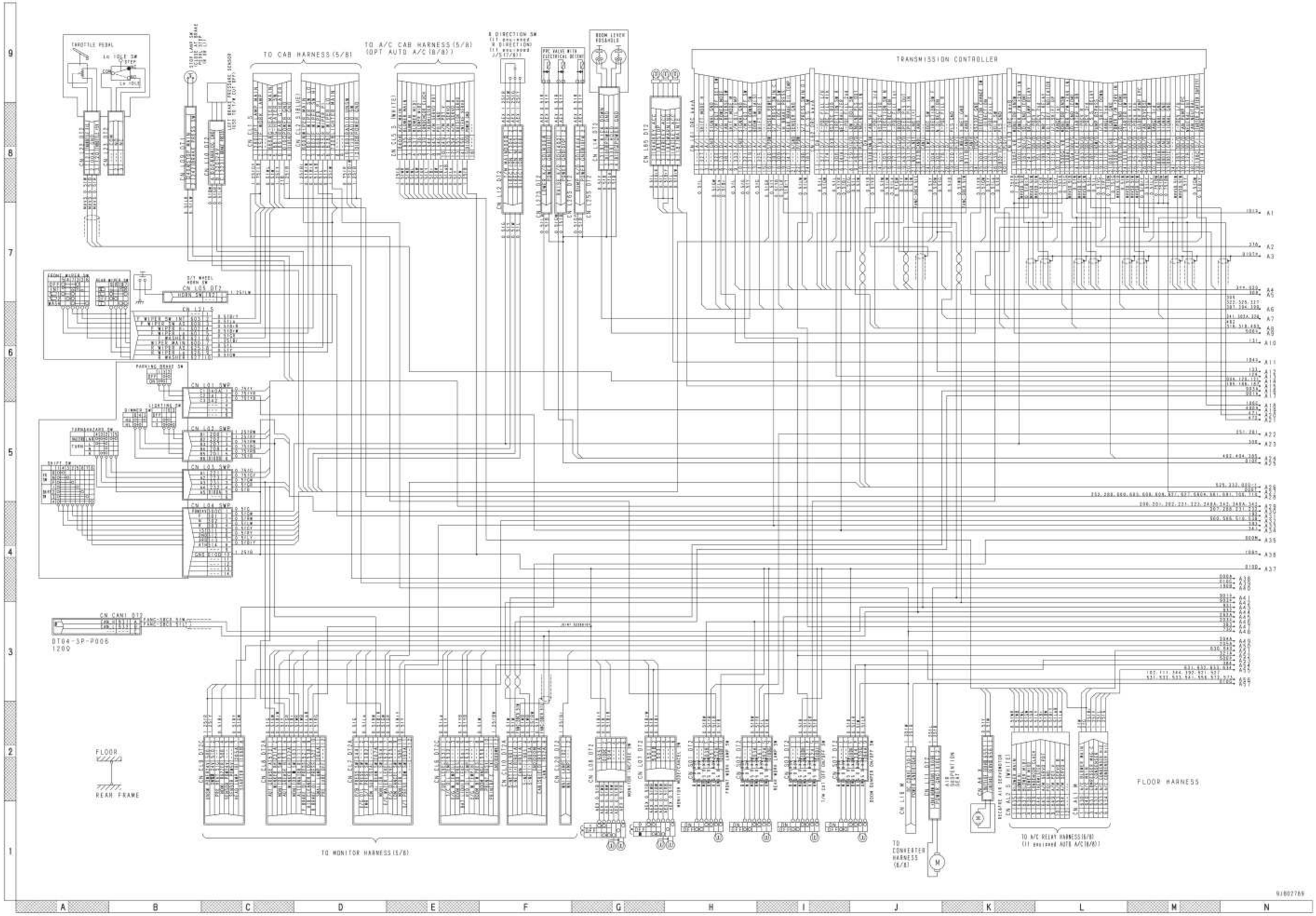
Failure code [D191KB] (Neutral safety relay: Short circuit)

Action code	Failure code	Trouble	Neutral safety relay: Short circuit (Transmission controller system)
E01	**D191KB**		
Contents of trouble	• Since the neutral safety relay system is shorted, signals are not output to the neutral safety relay.		
Action of controller	• Turns the output to the neutral safety relay OFF when grounding occurs.		
Problem that appears on machine	• When the right FNR switch or the joystick mode is turned ON, the engine does not start. (The engine can be started in the steering wheel mode, however.)		
Related information			

	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defective exchange relay (L115) (Internal disconnection or short circuit)	★Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting. • Set right FNR switch or joystick FNR switch in N. • Set directional lever in N. • Turn right FNR selector switch ON.		
			When exchange relay (L115) is replaced with a relay of the same type (5-pin type), if the condition becomes normal, the exchange relay is defective.		
	2	Defective neutral safety relay (L116) (Internal short circuit)	★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch.		
			L116 (male)	Resistance	
			Between (1) and (2)	200 – 400 Ω	
	3	Disconnection in wiring harness (Disconnection or defective contact of connector)	★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch.		
			Wiring harness between L63 (female) (37) – L101 (female) (14)	Resistance	Min. 1MΩ
			Wiring harness between L101 (female) (13) – L102 (female) (11)	Resistance	Min. 1MΩ
	4	Defective transmission controller	★Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting. • Set directional lever in N. • When right FNR switch is installed (Turn right FNR switch operation switch ON).		
			L63	Right FNR switch	Voltage
			Between (37) and chassis ground	N	17 – 30 V
				Other than N	Max. 1 V
			★Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting. • Set directional lever in N. • When joystick is installed (Turn armrest lock and joystick switch ON).		
			L63	Operation	Voltage
			Between (37) and chassis ground	When joystick FNR switch is in N and joystick lever is in neutral	17 – 30 V
				When joystick FNR switch is not in N	Max. 1 V
				When joystick lever is operated	Max. 1 V

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Electrical circuit diagram (3/8)



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