SEN05215-10

Shop Manual

MOTOR GRADER

GD555-5
GD655-5
GD675-5

SERIAL NUMBERS GD555-55001
GD655-55001 and up
GD675-55001

ecot3

KOMATSU®

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Classification and procedures for troubleshooting

Classification of troubleshooting

Mode	Contents
Display of code	Troubleshooting by failure code (Display of code)
E-mode	Troubleshooting of electrical system
H-mode	Troubleshooting of hydraulic and mechanical system
S-mode	Troubleshooting of engine

Procedure for troubleshooting

If a phenomenon which appears a source of a trouble occurs on the machine, select a proper troubleshooting No. according to the following procedure, and then go to the corresponding troubleshooting section.

1. **Procedure for troubleshooting when action code is displayed on machine monitor:**
   If an action code is displayed on the machine monitor, display the failure code by using the abnormality record display function (electrical system and mechanical system) of the machine monitor (EMMS).
   ★ Since two or more troubles may have occurred simultaneously, press [>] button and record all the failure codes.
   Perform the troubleshooting for the corresponding [Display of code] according to the displayed failure code.
   ★ Since the failure code "blinks" when a trouble is detected, that trouble may not have been repaired even if the failure code "lights up" when the starting switch is turned to the ON position (Some codes detect troubles when the starting switch is turned to the ON position, however).
   ★ If any failure code is recorded, be sure to perform the operation to reproduce that code to see if the trouble of that code has been or has not been repaired (For the reproduction method, see the troubleshooting in "Display of code").

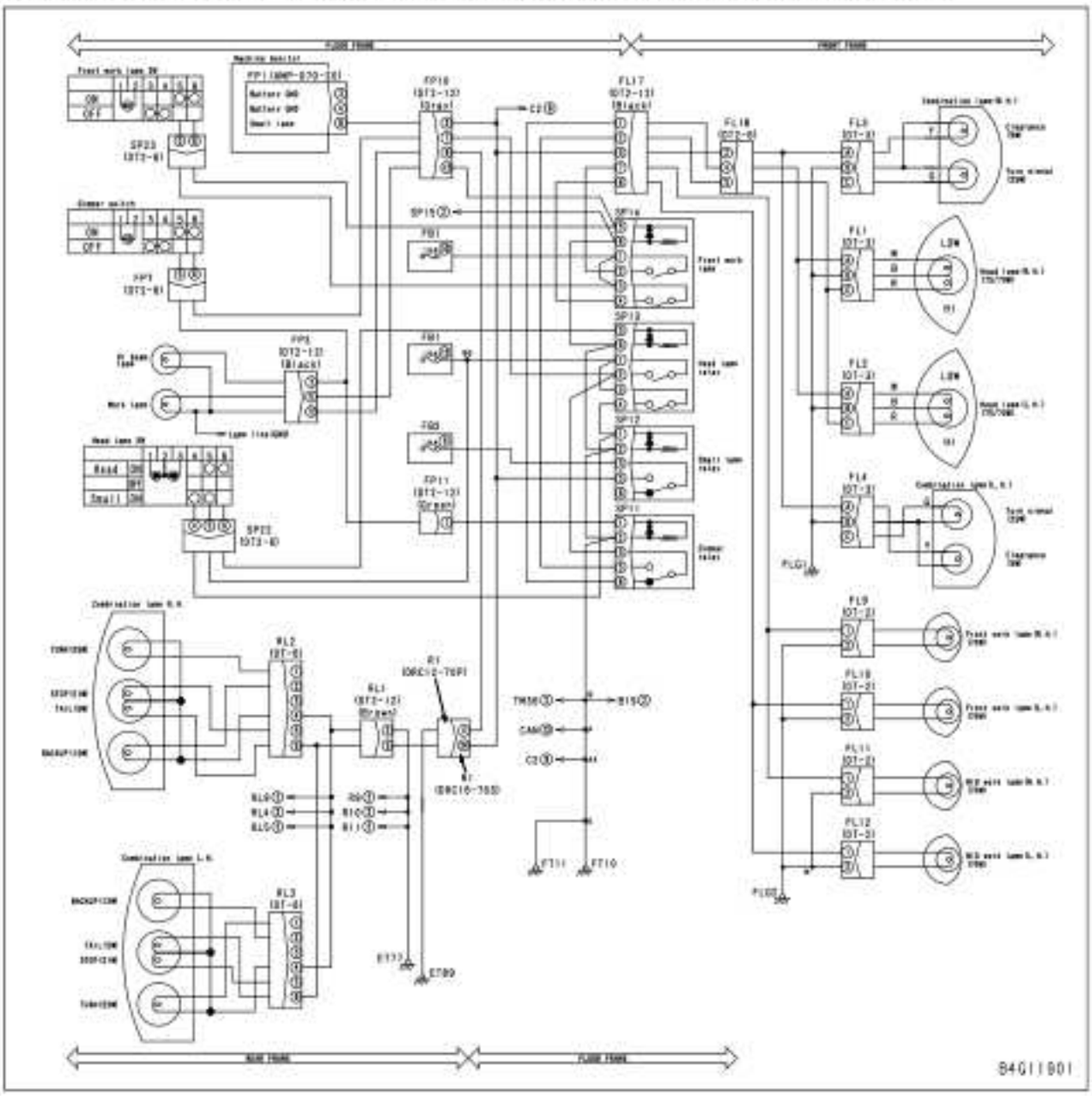
2. **Procedure for troubleshooting when failure code is recorded:**
   If an action code is not displayed on the machine monitor, display the failure code of the electrical system and mechanical system by using the abnormality record display function of the machine monitor (EMMS).
   If a failure code is recorded, perform troubleshooting for the corresponding "Display of code" according to the failure code.
   ★ Since the failure code "blinks" when a trouble is detected, that trouble may not have been repaired even if the failure code "lights up" when the starting switch is turned to the ON position (Some codes detect troubles when the starting switch is turned to the ON position, however).
   ★ If any failure code is recorded, be sure to perform the operation to reproduce that code to see if the trouble of that code has been or has not been repaired (For the reproduction method, see the troubleshooting in "Display of code").

3. **Procedure for troubleshooting when action code is not displayed and failure code is not recorded:**
   If no failure code is found in the machine monitor (EMMS), a trouble that the machine cannot find out by itself may have occurred in the electrical system or hydraulic and mechanical system.
   In this case, check the phenomenon which is assumed to show a trouble again and select the same phenomenon from the list of "Failure and troubleshooting numbers", and then perform troubleshooting corresponding to that problem in the "E-mode", "H-mode", or "S-mode".

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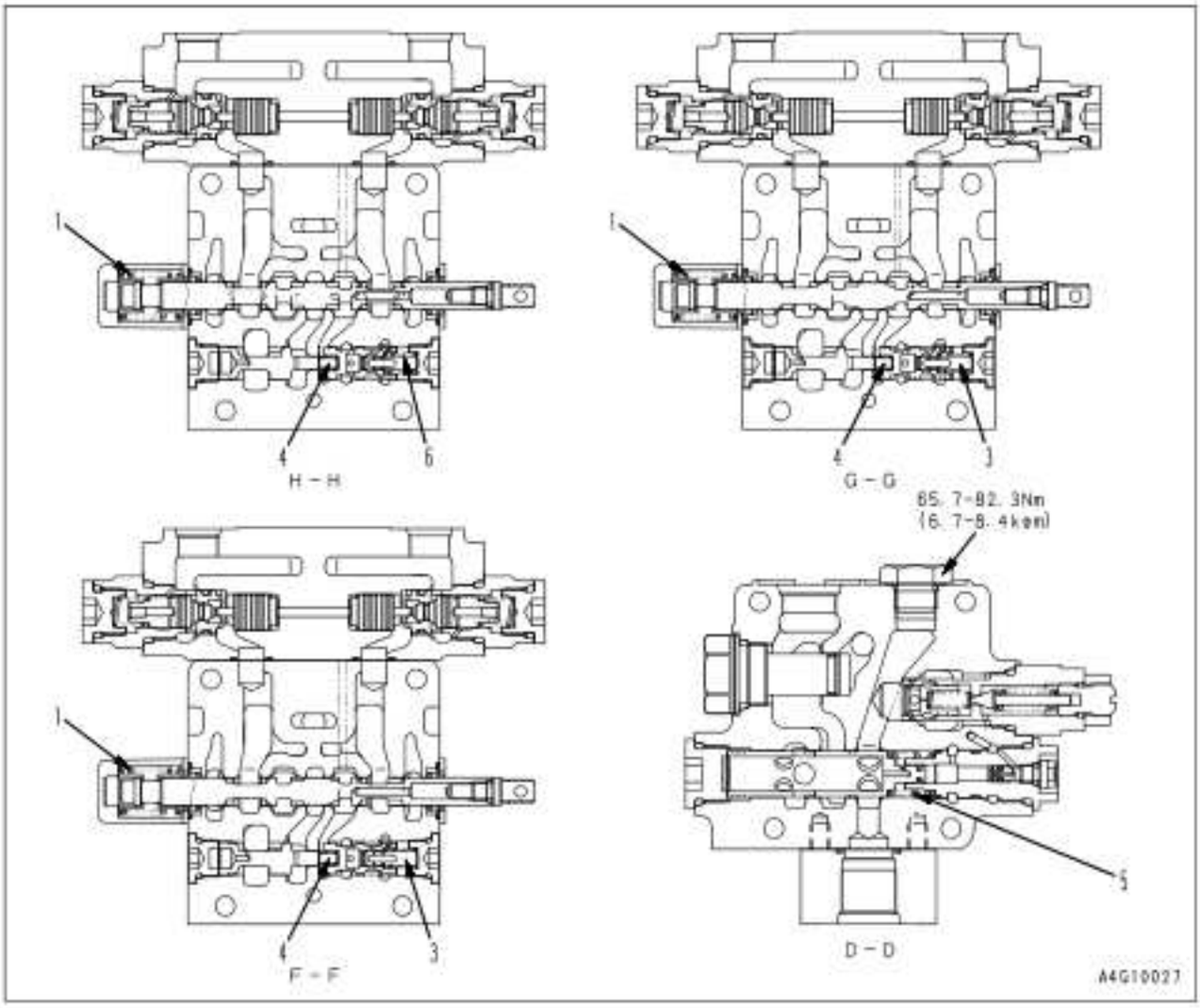
Cause		Procedure, measuring location, criteria and remarks		
6	Ground fault or short circuit in wiring harness	1. Turn starting switch to OFF position. 2. Disconnect connectors SP11, SP13, SP22, FL1, and FL2, and connect T-adapter to female side of SP13. 3. Remove fuse (12) in fuse box FB1.		
		Between SP13 (female) (2) and (6)	Resistance	Min. 1 MΩ
		Between SP13 (female) (5) and (6)	Resistance	Min. 1 MΩ
		Between SP13 (female) (1) and (2)	Resistance	Min. 1 MΩ
		Between SP13 (female) (1) and (5)	Resistance	Min. 1 MΩ

Circuit diagram related to headlamp, clearance lamp, tail lamp, and front working lamp



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Sectional view



Unit: mm

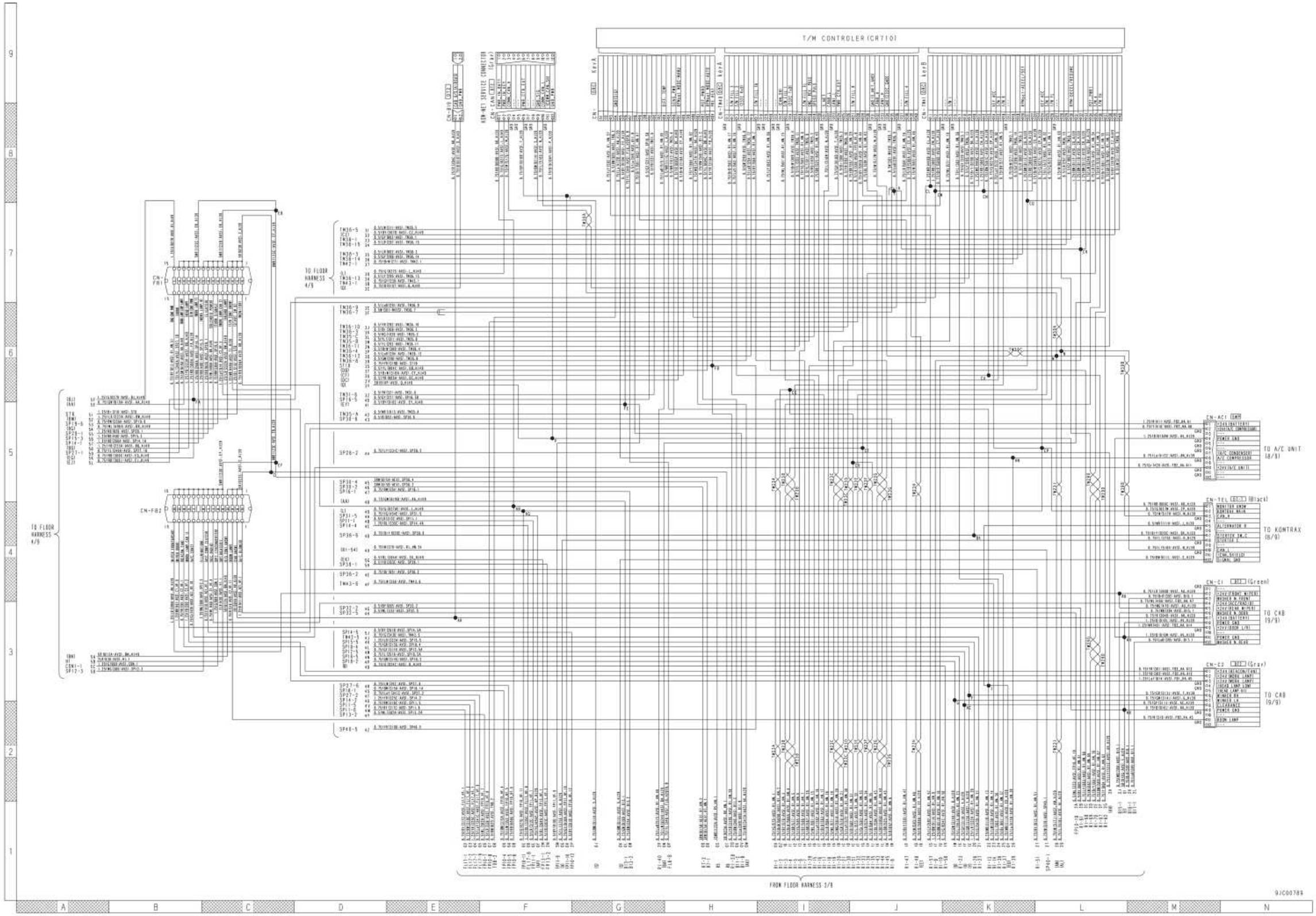
No.	Item	Criteria					Remedy
		Basic dimension			Allowable range		
		Free length x Outside diameter	Installed length	Installed force	Free length	Installed force	
3	Pressure compensation valve spring	56.27 x 20.1	25.4	34.8 N (3.55 kg)	—	27.9 Nm (2.84 kg)	
4	Pressure compensation valve spring	87.7 x 19.7	25.4	34.8 N (3.55 kg)	—	27.9 Nm (2.84 kg)	
5	Pressure compensation valve spring	35.25 x 19	20.9	134 N {13.63 kg}	—	107 Nm (10.9 kg)	
6	Pressure compensation valve spring	18.31 x 9.4	14.5	157 N (1.6 kg)	—	12.6 Nm (1.28 kg)	

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Electrical circuit diagram (3/9)

GD555, 655, 675-5

★ This figure covers the equipment and devices that are unavailable as optional items in some areas.



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