SERVICE MANUAL

E70BSR

ROPS Tier III

Midi Crawler Excavator

Print No. 84365679

NEW HOLLAND CONSTRUCTION

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3. ATTACHMENT DIMENSIONS

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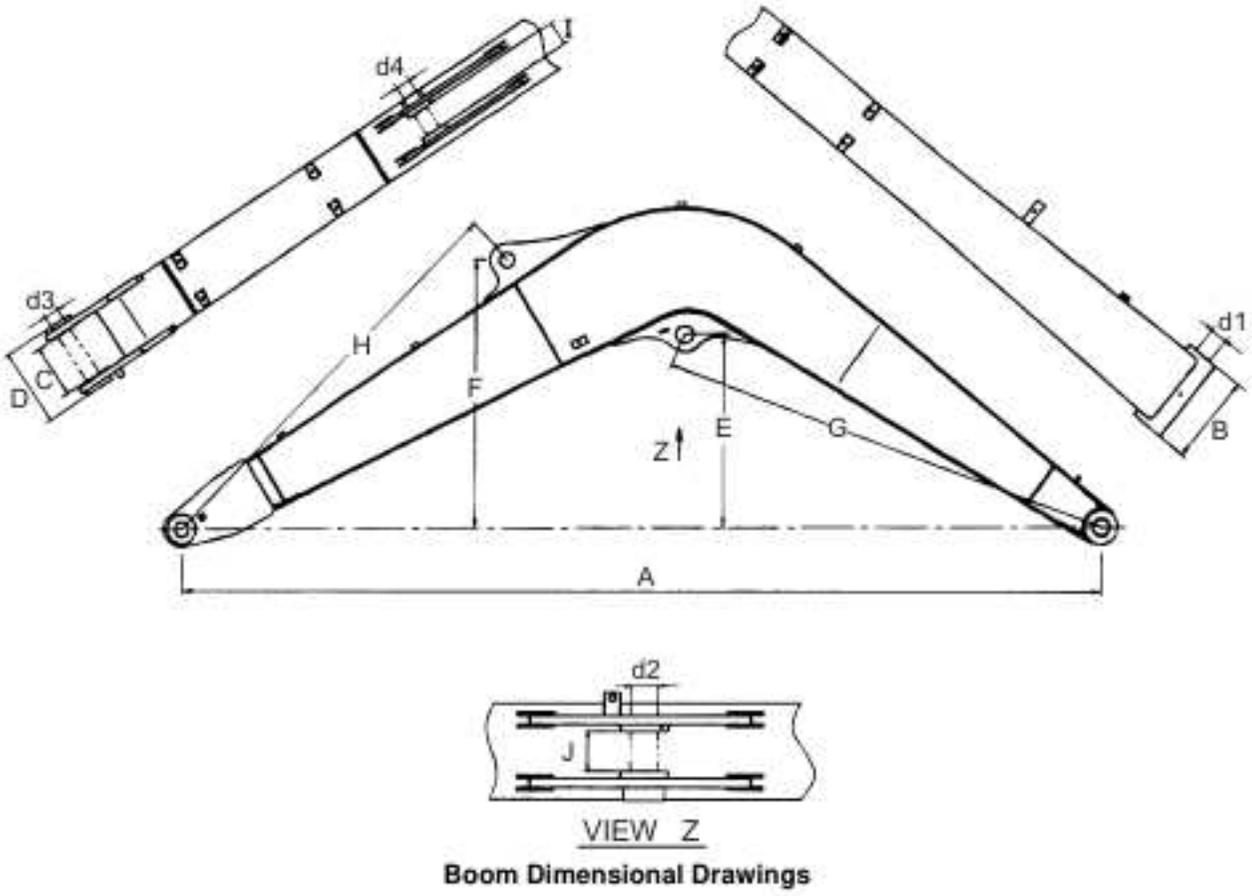
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3.1 BOOM

3.1.1 BOOM DIMENSIONAL DRAWING



Boom Dimensional Drawings

3.84M (12ft-7in) BOOM		STD
		YT02B00083P1
No.	NAME	DIMENSIONS: mm (ft-in)
A	Boom length	3,840 (12'7")
B	Boom foot width	360 (14.2")
C	Boom end inner width	215 (8.46")
D	Boom end outer width	303 (11.9")
E	Height of boom cylinder rod pin	806 (31.7")
F	Height of arm cylinder (head side) pin	1,074 (3'6")
G	Distance between pins of boss	R1,858.5 (6'1")
H	Distance between pins of bracket	R1,726.5 (5'8")
I	Arm cylinder (head side) inner width	100 (3.94")
J	Inner width of bracket on the boom cylinder (rod side) mounting section	100 (3.94")
d1	Boom foot pin dia.	60 dia. (2.36")
d2	Boom cylinder (rod side) pin dia.	70 dia. (2.76")
d3	Pin dia. of boom end.	60 dia. (2.36")
d4	Arm cylinder (head side) pin dia.	60 dia. (2.36")

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Table 46-43

Error code		G032		
Trouble		Mechatro controller direct input speed sensor is overrun.		
Judging condition		Engine rpm input is 3000rpm or more. (Only trouble history)		
Symptom		Operate without problem.		
Control in the event of failure		Engine speed slows down to 0 rpm.		
Returned in normal condition		It returns automatically in normal condition.		
Service diagnosis checking screen		Screen No.	2	G-3 MEAS 1 (for mechatro controller)
		Screen No.		
		Screen No.		
Checking object				Checking contents and remedy
1	-Engine speed sensor SE-13			Measure the resistance between terminals of speed sensor. Normal value: 1.6 to 2.0 kilo-ohms
2	-Wiring between engine speed sensor and controller CN-136F CN-106F			Check wiring for possible failure according to the wiring checking procedure and repair it if necessary. Especially check wiring for false disconnection and noise included.
3	-Mechatro controller			Check that the error is corrected after replacement of controller. (Controller is broken by only applying power to grounding of signal.)

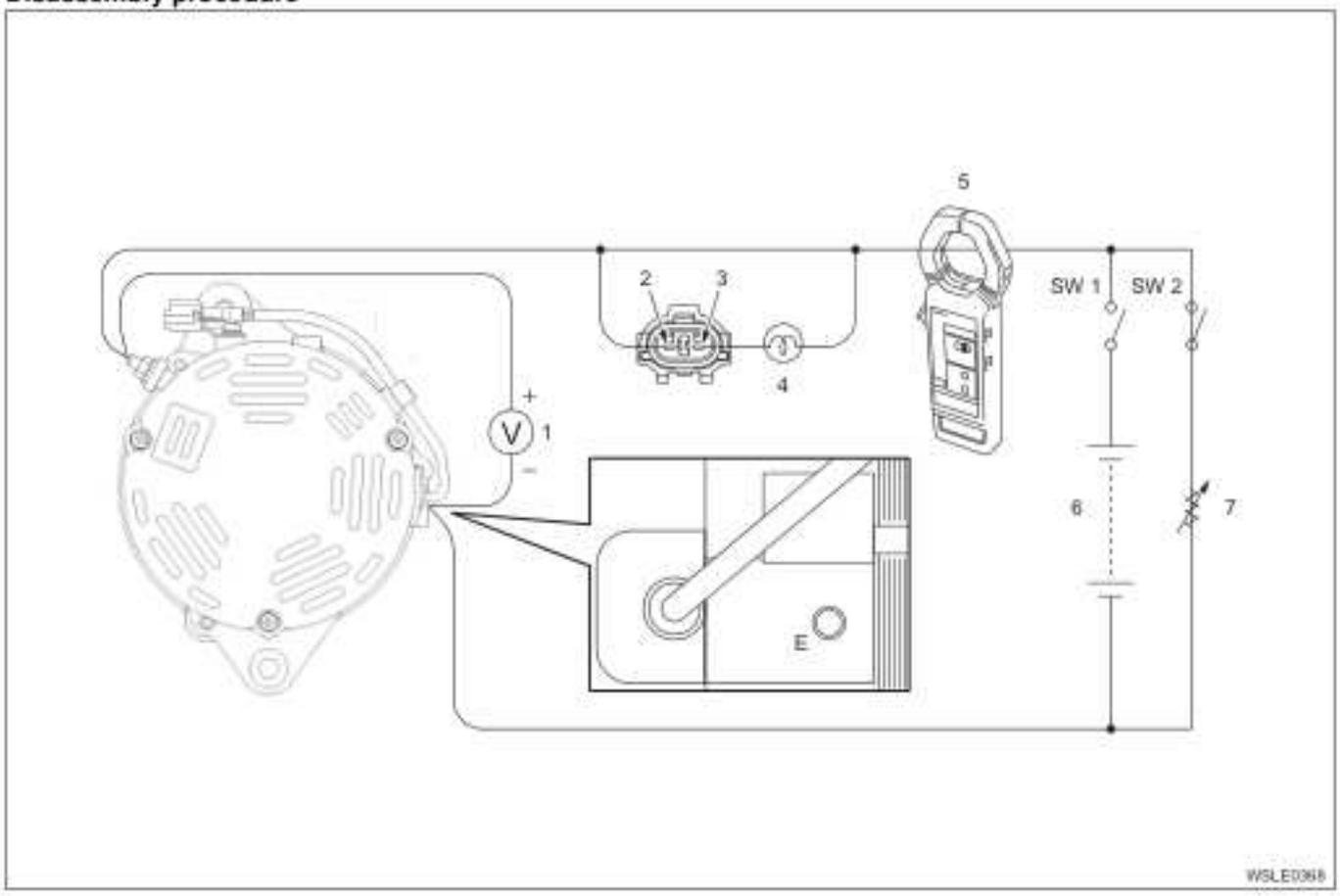
Table 46-44

Error code		G033		
Trouble		Mechatro controller direct input speed sensor, Disconnection		
Judging condition		Voltage of alternator is 12V or more, and speed sensor indicates excess low engine rpm.		
Symptom		Operate without problem.		
Control in the event of failure		Normal control		
Returned in normal condition		It returns automatically in normal condition.		
Service diagnosis checking screen		Screen No.	2	G-3 MEAS 1 (for mechatro controller)
		Screen No.		
		Screen No.		
Checking object				Checking contents and remedy
1	-Engine speed sensor SE-13			Measure the resistance between terminals of speed sensor. Normal value: 1.6 to 2.0 kilo-ohms
2	-Wiring between engine speed sensor and controller CN-136F CN-106F			Check wiring for possible failure according to the wiring checking procedure and repair it if necessary.
3	-Mechatro controller			Check that the error is corrected after replacement of controller. (Controller is broken by only applying power to grounding of signal.)

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Actual wiring diagram for performance test of IC regulator built-in generator

Disassembly procedure



Name

1. Voltmeter
2. R Terminal
3. L Terminal
4. Charging Lamp 24 V-3 W
5. Clamp Tester Ammeter
6. Battery 24 V
7. Variable Resistor

Regulated voltage measurement of regulator

Close SW1 switch, and warm-up five to ten minutes at approx. 1500 rpm in generator until an ammeter shows 6 A or less.
After confirming that an ammeter shows between 2 and 6 A, set the generator between approx. 3000 to 4000 rpm. If an voltmeter shows between 27.5 and 29.5 V, the regulated voltage of regulator is normal.
If the ammeter shows 6 A or more, charge the battery for a while or replace it with full-charged battery.
Replace the regulator if the voltmeter shows out of range between 27.5 and 29.5 V.

Specified value of regulated voltage
27.5 — 29.5 V (+25°C (77°F))

Measurement of the output current

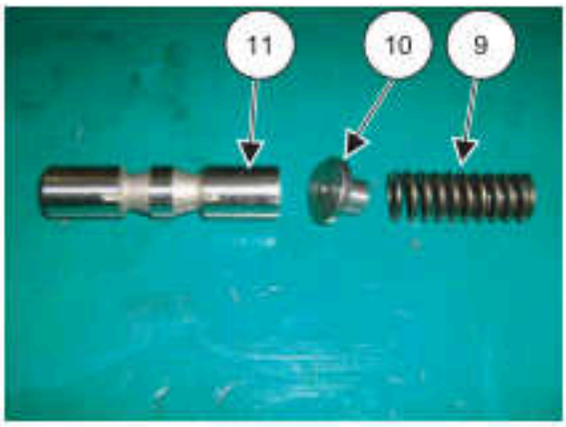
Close SW1 and SW2 switches, and raise the generator speed to 5000 rpm. While keeping the voltmeter showing 27 V, measure the maximum value of output current with a variable resistor.
In this time, judge as normal if the output current is 50 A or more.

Note:

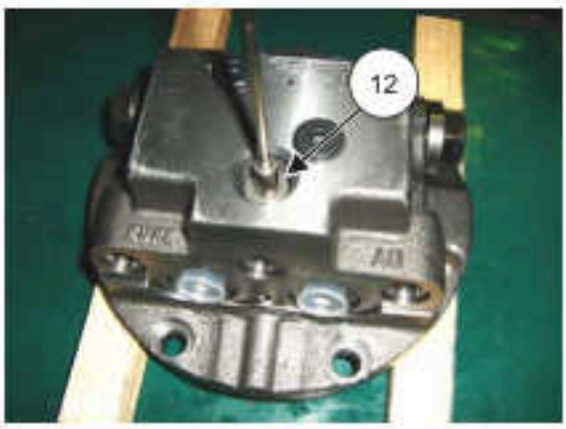
- Do not cut off battery circuit during generator rotating.
- Do not connect to L terminal if the charging lamp (24 V-3 W) is not used.
  Never connect L terminal and B circuit directly. Diode for excitation may be broken.
- The electrical load from the L terminal should be 1.0 A or less continuously.

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8. Remove the spring (9), pusher (10), and spool (11) from the motor cover. These parts are located under the cover (8).



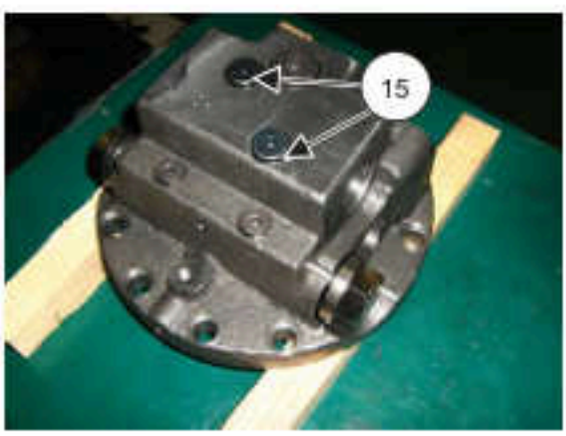
9. Remove the plug (12) from top of the motor cover.



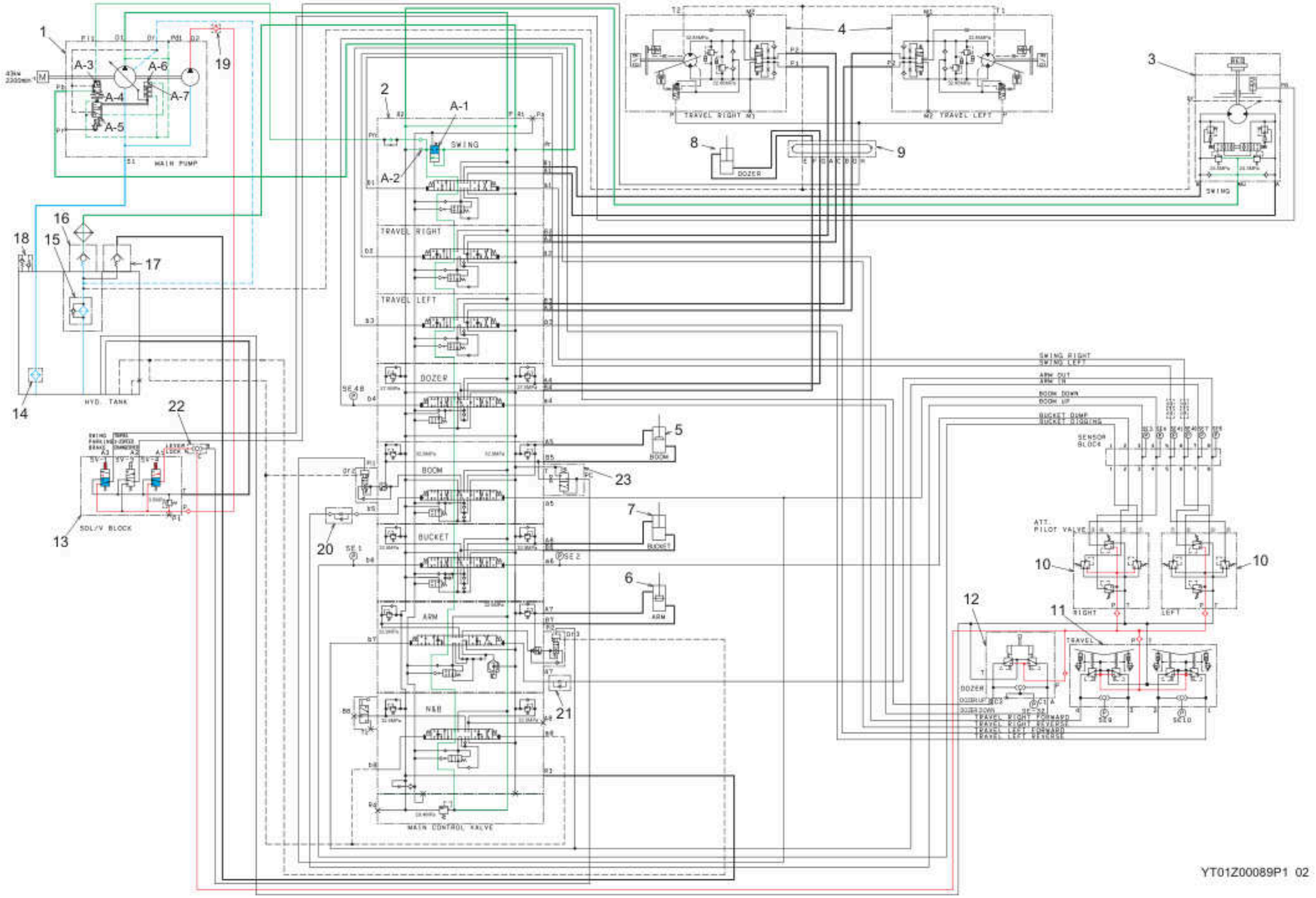
10. Remove the spring (13) and spool (14) from the motor cover. These parts are located under the plug (12).



11. Remove 2 plugs (15).



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YT01Z00089P1 02

Neutral circuit: Safety lock lever ON

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