SERVICE MANUAL

E230CSR
Crawler Excavators

Print No. 47426609A

NEW HOLLAND CONSTRUCTION

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3. ATTACHMENT DIMENSIONS

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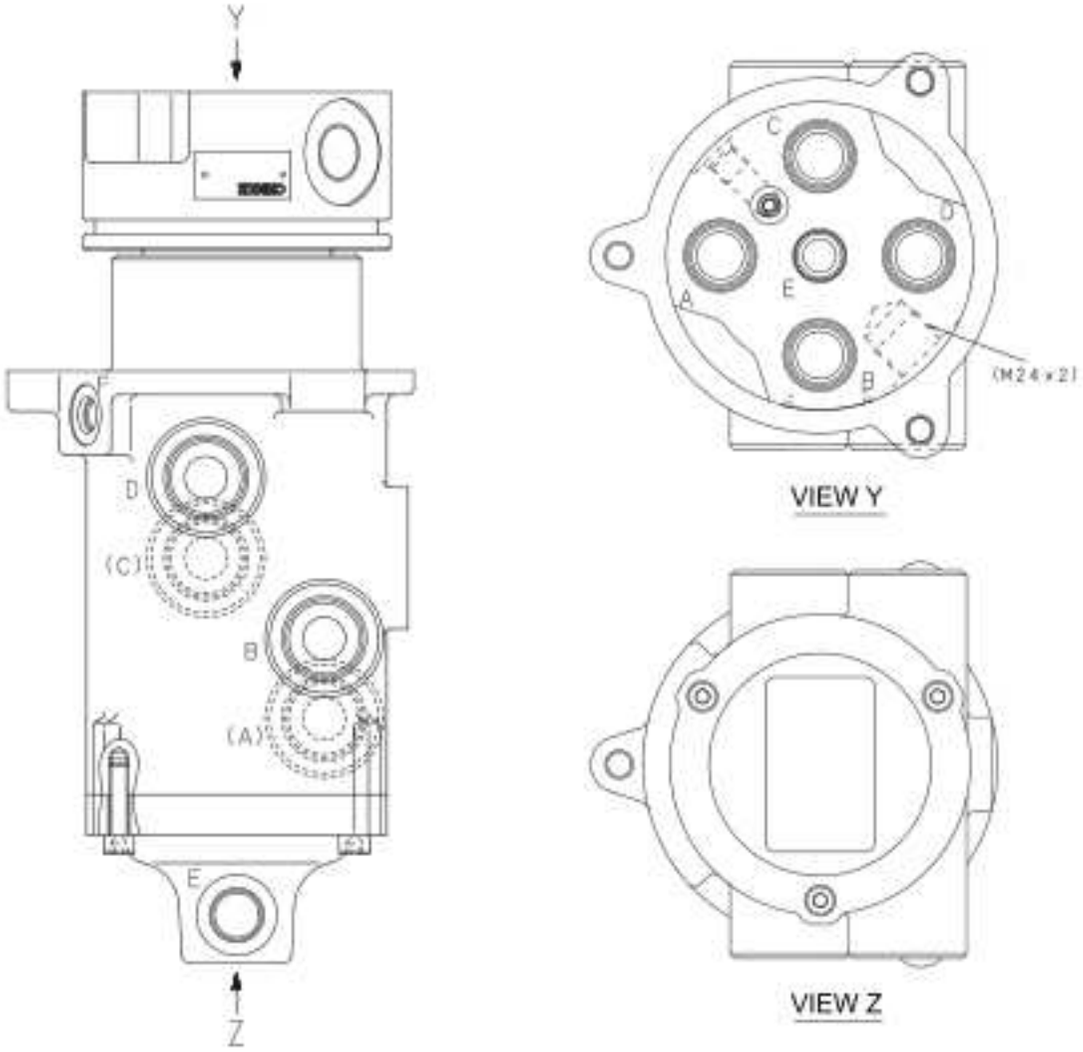
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24.1.7 SWIVEL JOINT

24.1.7.1 GENERAL VIEW



General view of swivel joint

24.1.7.2 SPECIFICATIONS

Item		Specifications
Assy parts No.		YN55V00053F1
High pressure ports A, B, C, D	Working pressure Max. impact pressure Rated flow	34.3 MPa (4970 psi) 51.5 MPa (7470 psi) 255 L/min (67 gal/min)
Low pressure ports E	Working pressure Rated flow	0.5 MPa (73 psi) 50 L/min (13 gal/min)
Low pressure ports H, I	Working pressure Rated flow	5 MPa (725 psi) 30 L/min (8 gal/min)
Revolution speed		15 min-1 (15 rpm)
Ports size	A, B, C, D (Body) A, B, C, D (Stem) E F	PF1 PF3/4 PF1/2 PF1/4
Length: L		368 mm (14.5")
Weight		25 kg (245 lbs)

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Table46-103

Error code	R154		
Trouble	Travel alarm relay error		
Judging condition	The mechatro controller output line to travel alarm relay is short-circuited with the power source.		
Symptom	Travel alarm does not actuate.		
Control in the event of failure	Relay output is stopped.		
Returned in normal condition	When the power is OFF		
Service diagnosis checking screen	Screen No.	17	D15
	Screen No.		
	Screen No.		

	Checking object	Checking contents and remedy
1	□Travel alarm relay R-8	When error is cancelled after removing of travel alarm relay, check relay unit for failure, replace it with new one if failed. When resistance between relays (1) and (2) is 0 Ω, it is in abnormal condition. 
2	□Wiring between travel alarm relay and controller CN-109F, CN2-2 □Fuse& relay box E-1	When R154 is left displayed with the relay removed Check that no power 24V is produced on relay (-) line according to the wiring checking procedure and replace it if necessary. When no failure found after checking on wiring and R154 is left displayed. Replace fuse/relay box.
3	□Mechatro controller	Check that the error is corrected after replacement of controller.

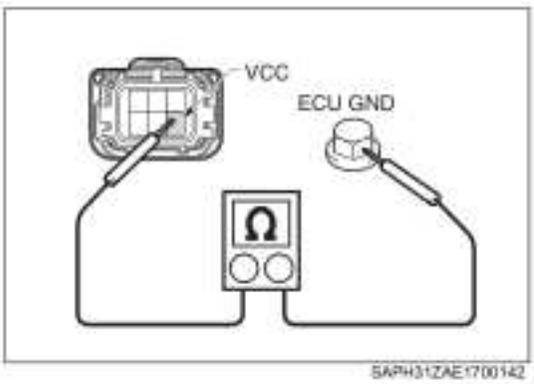
Table46-104

Error code	R164		
Trouble	Auto idle stop relay 2 relay error		
Judging condition	The mechatro controller output line to auto idle stop relay 2 is short-circuited with the power source.		
Symptom	Power source for mechatro controller often turns off. Auto idle stop relay 2 does not actuate.		
Control in the event of failure	Relay output is stopped.		
Returned in normal condition	When the power is OFF		
Service diagnosis checking screen	Screen No.	4	K-1 AIS RELAY 2
	Screen No.		
	Screen No.		

	Checking object	Checking contents and remedy
1	□Auto idle stop relay 2 relay R-24	When error is cancelled after removing of auto idle stop relay 2, check relay unit for failure, replace it with new one if failed. When resistance between relays (1) and (2) is 0 Ω, it is in abnormal condition. 
2	□Wiring between auto idle stop relay 2 and controller CN-109F, CN2-2 □Fuse& relay box E-1	When R164 is left displayed with the relay removed Check that no power 24V is produced on relay (-) line according to the wiring checking procedure and replace it if necessary. When no failure found after checking on wiring and R164 is left displayed. Replace fuse/relay box.
3	□Mechatro controller	Check that the error is corrected after replacement of controller.

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2	CHECK THE CONTINUITY OF HARNESS

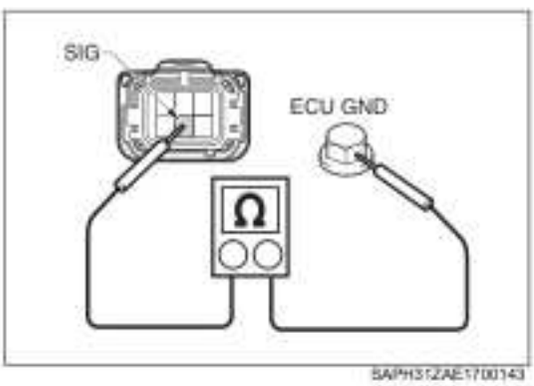


SAPH31ZAE1700142

1. Disconnect the engine ECU connector.
2. Check continuity between the terminals ECU GND and VCC of the fuel rail pressure sensor (sub) connector on the harness side.

NOTICE • **If it is difficult to check only the sensor, proceed to step 3.**

Standard value: ∞Ω



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3. Check continuity between the terminals ECU GND and SIG of the fuel rail pressure sensor (sub) connector on the harness side.

Standard value: ∞Ω

NO → Fault in harness

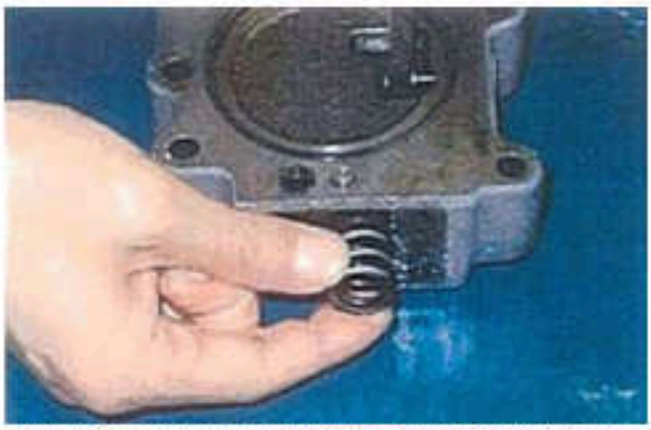
YES

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CAUTION

Operate the feedback lever and make sure that it does not have much looseness and that it operates without catching.

4. nstalling spring seat, pilot spring and plunger (See Fig. "Regulator exploded view")
   Place spring seat (624), pilot spring (646) and plunger (627) into the hole in the sleeve.
5. Installing cover (See Fig. "Regulator exploded view")
   Attach cover (656) to casing (601) and fasten them together with socket bolts (402).



Installing spring seat (624), pilot spring (646) and plunger (627)

Note

The cover is fitted with set screw (924) and hex nut (801).

6. Assembling the Pf sleeve and the pilot piston (See Fig. "Regulator exploded view")
   Assemble Pf sleeve (631) and pilot piston (643) into casing (601).



Assembling the sleeve (631) and the pilot piston (643).

7. Installing valve casing (See Fig. "Regulator exploded view")
   Attach valve casing (325) fitted with solenoid proportional reducing valve (079) to casing (601) and fasten them together with socket bolts (407)(408).

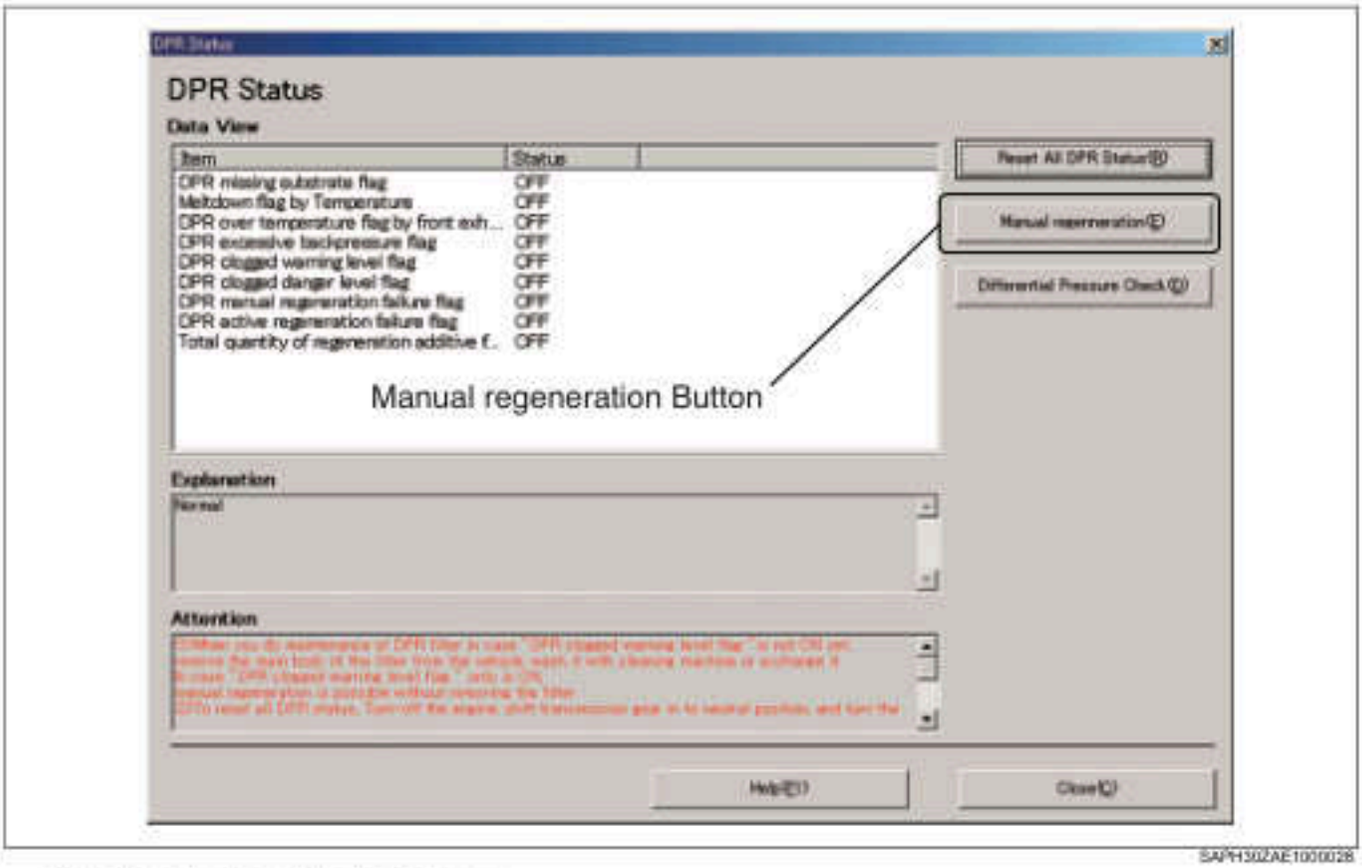
   This completes assembly.



Installing valve casing (325)

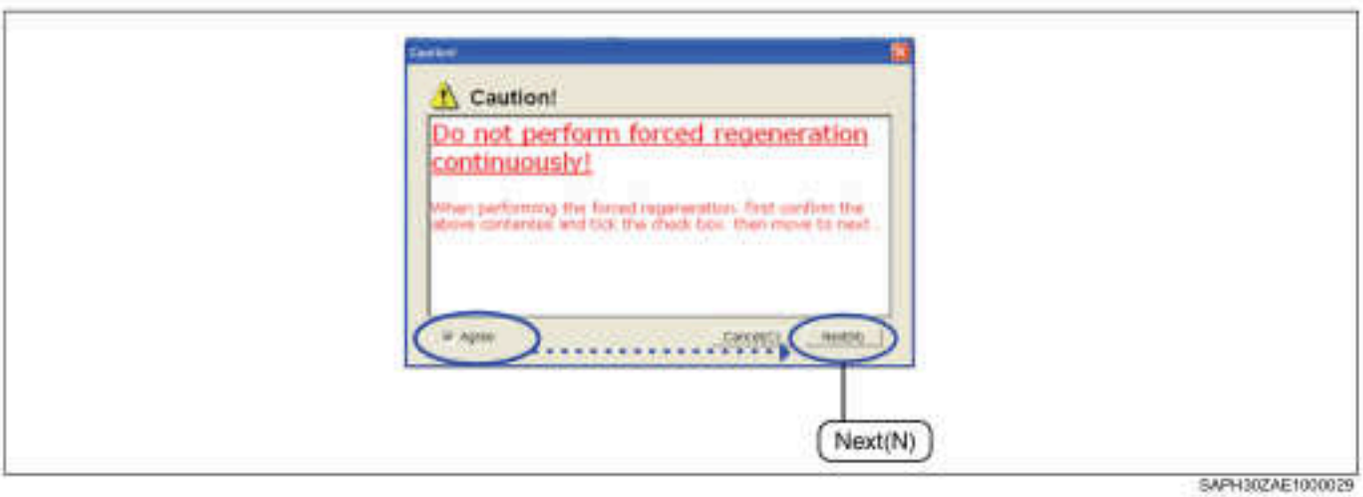
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(5) Click the "Manual regeneration" button in the DPR status window.



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(6) The "Caution window" will appear.

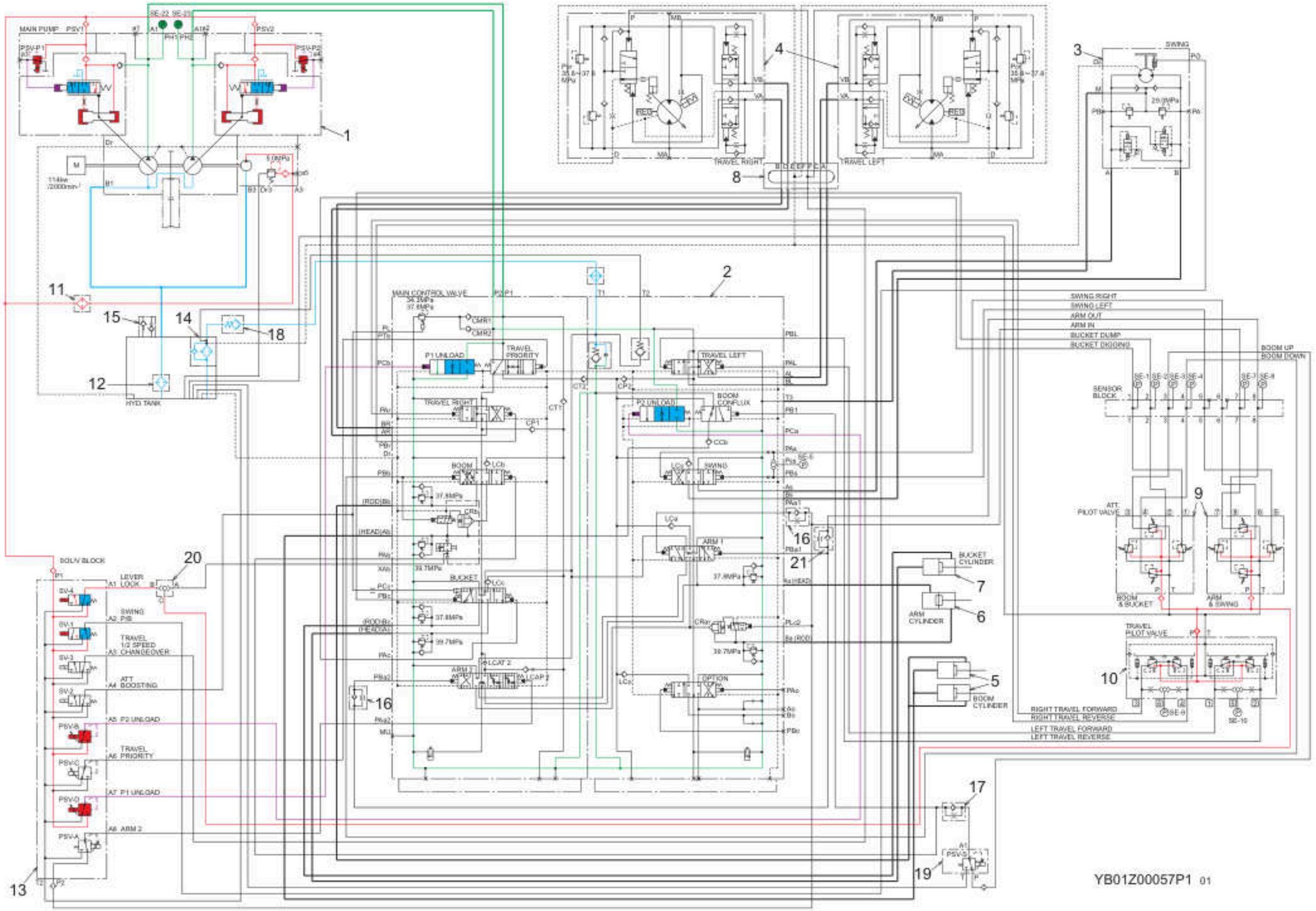


SAPH30ZAE1000029

a. Read the caution and accept its by clicking in the "Agree" check box on the left.
b. If you click "Next" button, the "Manual regeneration" window will appear.

⚠ **CAUTION** • **The "Next" button is not displayed unless you check "Agree".**

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PRESSURE DRAIN (RELEASE) CIRCUIT : At pressure release mode.

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