KOBELCO

SERVICE MANUAL

Hydraulic Excavator

140SRLC-3

Tier 4

S5YY0024E02

Issued September 2012
1st Edition

APPLICABLE:
140SRLC-3 . . . . . YH07-09001~

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1 - SPECIFICATIONS

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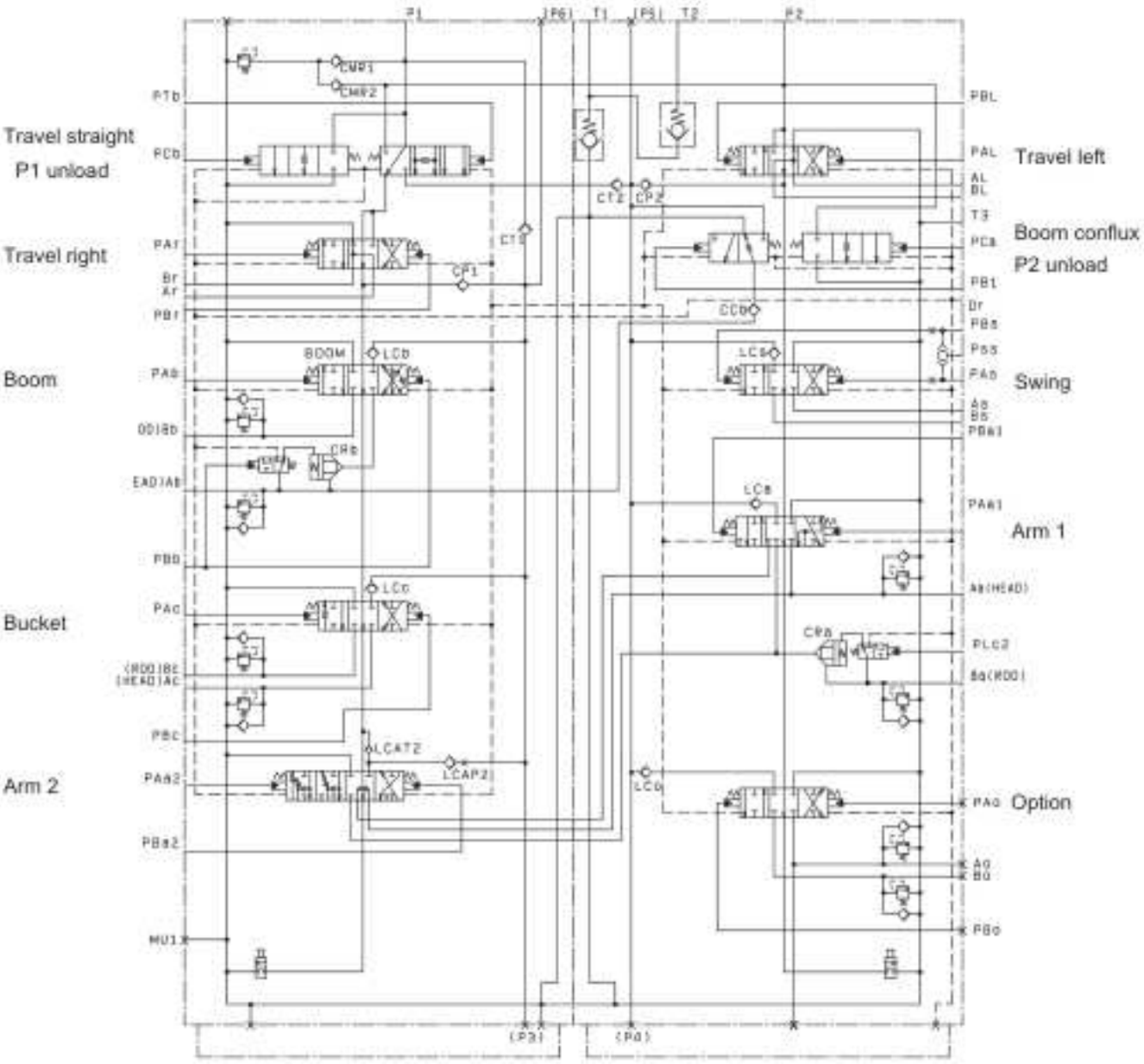
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24.1.2.2.2 HYDRAULIC CIRCUIT DIAGRAM



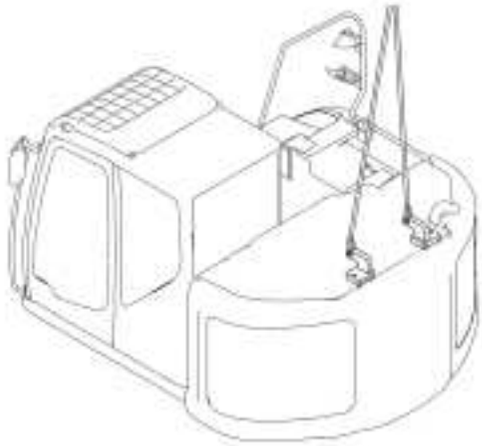
Hydraulic circuit diagram

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33.1.11 COUNTERWEIGHT

33.1.11.1 PREPARATION FOR REMOVAL

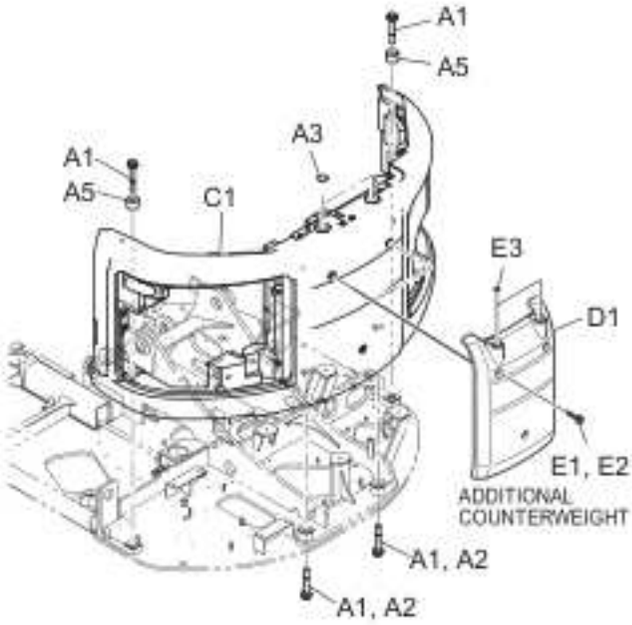
(1) Removing bonnet assy
Remove bonnet (C1) located at upper of engine.
(See 33.1.4 GUARD)
(2) Remove stay bracket (B6).
(See 33.1.4 GUARD)
(3) Remove bonnet assy (C2),(F1).
(See 33.1.4 GUARD)
(4) Installing of lifting jig
Remove plugs (A3) from counterweight, and install right and left jigs (Refer to Chapter 11. Tools) for lifting to counterweight.
Tools: Spanner: 55mm



Lifting up counterweight

33.1.11.2 REMOVAL

(1) Lifting up counterweight temporarily
Hook wire rope to lifting jig, and lift it and stretch wire rope to the degree where it is providing no slack temporarily.
Weight of counterweight ;
Approx. 3,300kg (7,277 lb)
Wire more than 16dia. (0.63 inch) ;
1.5m (5ft) X 2 pcs.
(2) Removing counterweight
1. Remove 4 capscrews (A1) M27X195.
Tools: Socket: 55mm
2. Remove shim. (Select)
3. Remove counterweight (C1).
(3) Removal of additional counterweight (Optional weight)
1. Attach 2 eye bolts to additional counterweight in the same way of standard counterweight and hoist it temporally.
Additional counterweight ; 585 kg (1,290 lb)
2. Loosen 3 capscrews (E1) M20X135 and remove counterweight (D1).
Tools: Socket: 30mm



Removing counterweight

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Table46-102

Error code	R134			
Trouble	Swing flasher right relay error			
Judging condition	The mechatro controller output line to swing flasher right relay is short-circuited with the power source.			
Symptom	Right swing flasher does not light.			
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.	16	D13	
	Screen No.			
	Screen No.			
Checking object			Checking contents and remedy	
1	• Swing flasher relay R-19		When error is cancelled after removing connector (CN-74F) of swing flasher relay, check relay unit for failure, replace it with new one if failed. When resistance between relays (HB) and (HC) is 0 Ω, it is in abnormal condition. 	
2	• Wiring between swing flasher relay and controller CN-74F, CN-109F		When R134 is left displayed with the relay removed Check that no power 24V is produced on relay (-) line (as shown right upper figure C) according to the wiring checking procedure and replace it if necessary.	
3	• Mechatro controller		Check that the error is corrected after replacement of controller.	

Table46-103

Error code	R144			
Trouble	Swing flasher left relay error			
Judging condition	The mechatro controller output line to swing flasher left relay is short-circuited with the power source.			
Symptom	Left swing flasher does not light.			
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	D14	
	Screen No.			
	Screen No.			
Checking object			Checking contents and remedy	
1	• Swing flasher relay R-19		When error is cancelled after removing connector (CN-74F) of swing flasher relay, check relay unit for failure, replace it with new one if failed. When resistance between relays (HB) and (HC) is 0 Ω, it is in abnormal condition. 	
2	• Wiring between swing flasher relay and controller CN-74F, CN-109F		When R144 is left displayed with the relay removed Check that no power 24V is produced on relay (-) line (as shown right upper figure B) according to the wiring checking procedure and replace it if necessary.	
3	• Mechatro controller		Check that the error is corrected after replacement of controller.	

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6 - ENGINE

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4 - DISASSEMBLY

5 - TROUBLESHOOTING

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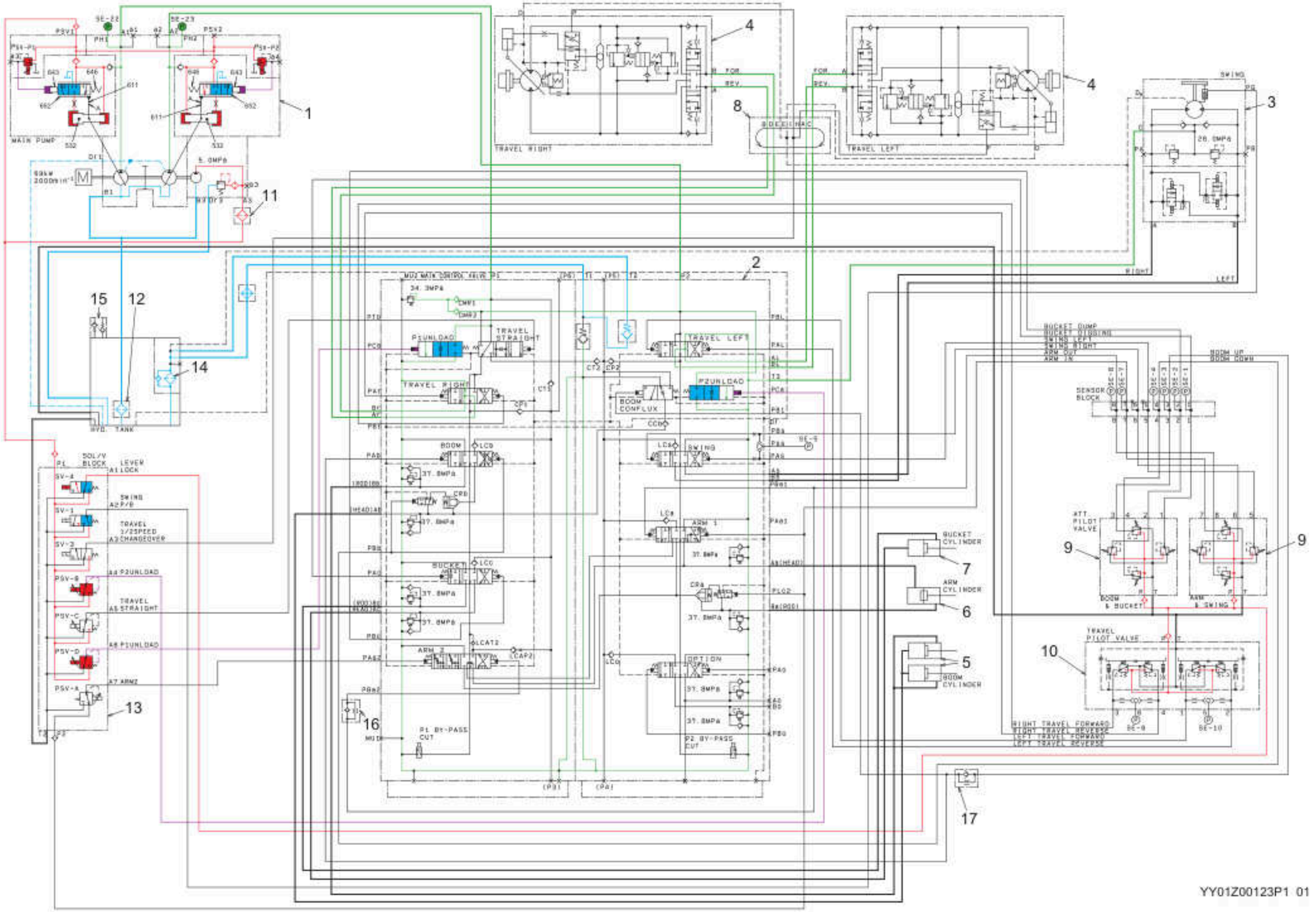
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NEUTRAL CIRCUIT : Positive control function at safety lock lever down (unlocked position)

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