SERVICE MANUAL

E160C Blade Runner
Crawler Excavator

Part number 47497833A
English
October 2012

NEW HOLLAND CONSTRUCTION

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3. ATTACHMENT DIMENSIONS

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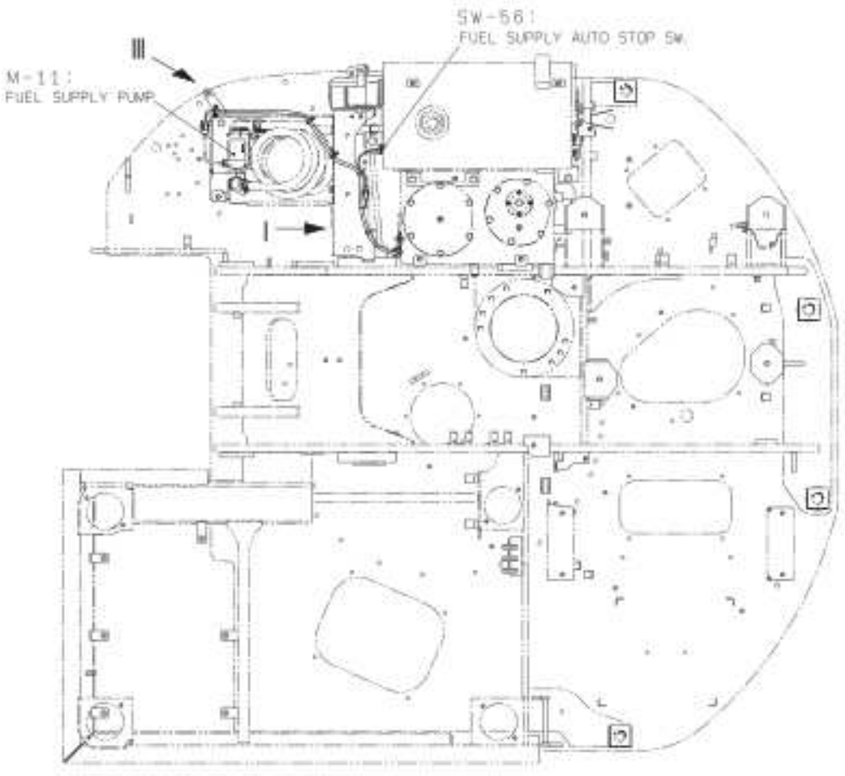
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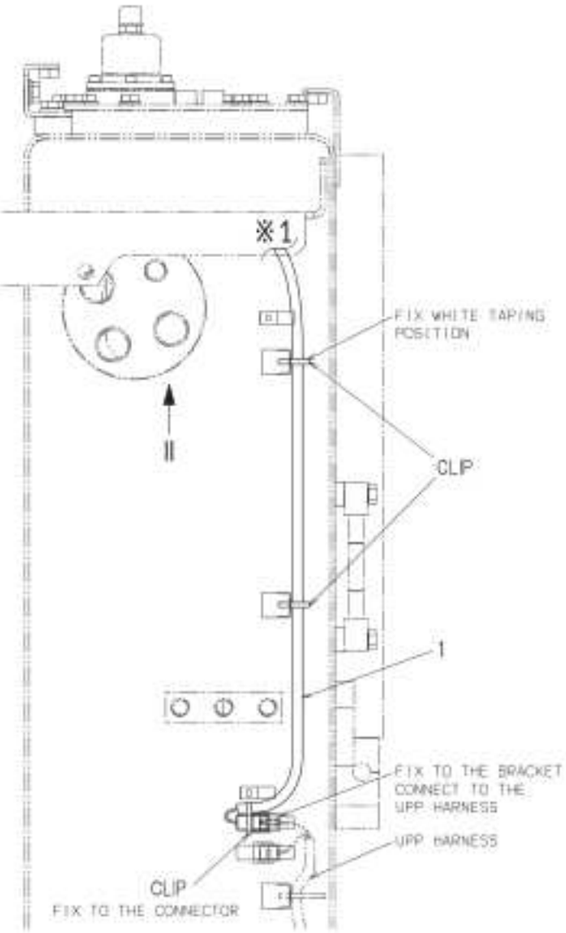
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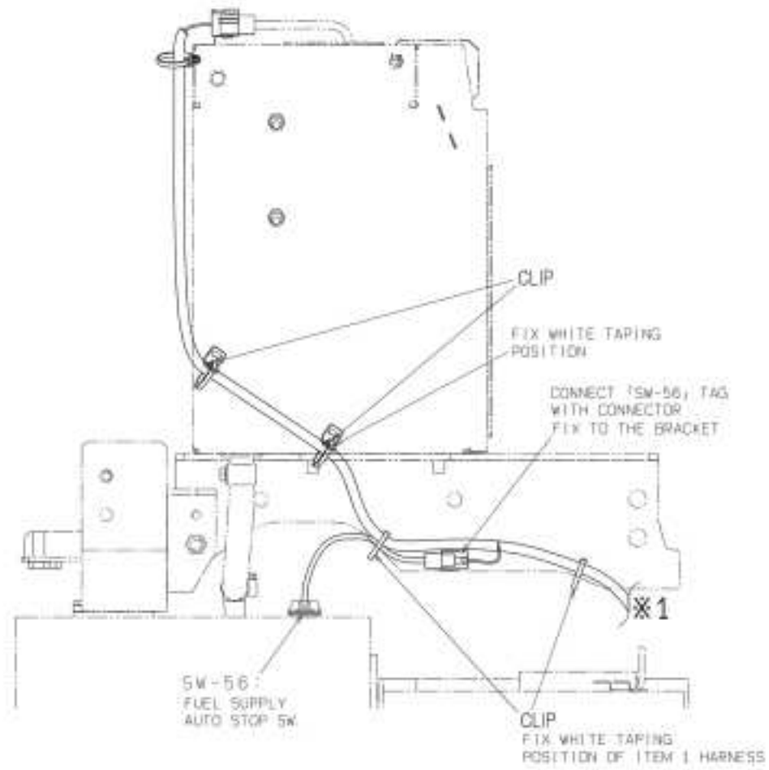
23.3.10 UPPER HARNESS ASSY (FUEL PUMP)

UPPER HARNESS ASSY		YY13E00181F1	(01)	
ITEM	PART NAME	PART No.	Q'TY	REMARKS
1	HARNESS	YY13E01365P1	1	FUEL PUMP

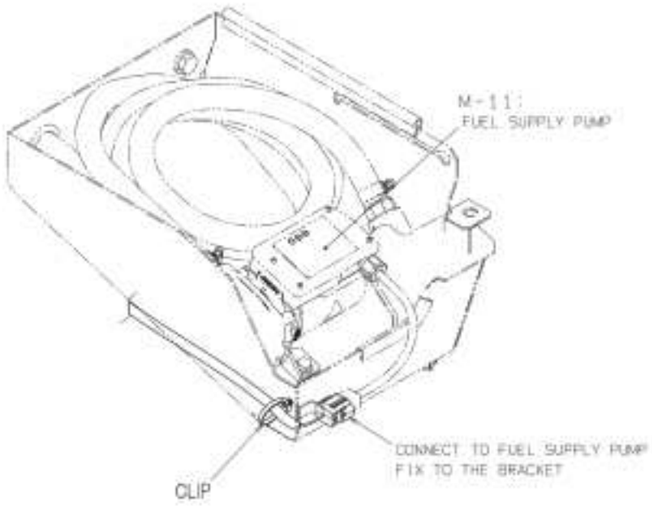




VIEW I



VIEW II



VIEW III

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Error code	B034		
Trouble	Arm-out pressure sensor's power source is shortcut.		
Judging condition	The input voltage from arm-out pressure sensor is 4.7V or more.		
Symptom	Shock at stopping of arm-out is great.		
Control in the event of failure	Set proportional valve output rate of P1 and P2 pumps to constant current. (Current when all operation is in neutral.) Only on independent operation of boom-up, set output of P1, P2 unload proportional valves to 750mA.		
Returned in normal condition	It returns automatically in normal condition.		
Service diagnosis checking screen	Screen No.	5	B-3 ARM OUT
	Screen No.		
	Screen No.		

	Checking object	Checking contents and remedy
1	-Arm-out pressure sensor SE-8	When B034 is cancelled and other error occurs by turning starter switch on after exchanging the connector with other sensor. Check sensor unit for possible failure. If failure found, replace it.
2	-Wiring between arm-out pressure sensor and controller CN-131F CN-101F	When B034 is displayed after turning the starter switch on after the connector is exchanged with other sensor. 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.

Error code	B042		
Trouble	Arm-in pressure sensor outputs error		
Judging condition	After starter switch ON and engine does not start yet. And the input voltage from the arm-in pressure sensor after starter switch ON is in the range of 1.4V or more to less than 4.7V.		
Symptom	The arm-in operability becomes poor.		
Control in the event of failure	Normal control		
Returned in normal condition	Not returned automatically under normal condition. Switch the power OFF once and turns on it again.		
Service diagnosis checking screen	Screen No.	5	B-4 ARM IN
	Screen No.		
	Screen No.		

	Checking object	Checking contents and remedy
1	-Arm-in pressure sensor SE-7	When B042 is cancelled and other error occurs by turning starter switch on after exchanging the connector with other sensor. Check sensor unit for possible failure. If failure found, replace it.
2	-Wiring between arm-in pressure sensor and controller CN-130F CN-101F	When B042 is displayed after turning the starter switch on after the connector is exchanged with other sensor. 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.

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4.7 Clearance Between Connecting Rod Bearing and Crankpin - Measure

CAUTION

When grinding crankpins, be sure to grind all the pins to the same size.

Finish the fillet radius to the specified dimension.

(1) Assemble the bearing into the big end of the connecting rod.

(2) Tighten the connecting rod cap to the specified torque.

(3) Measure the inside diameter of the connecting rod bearing.

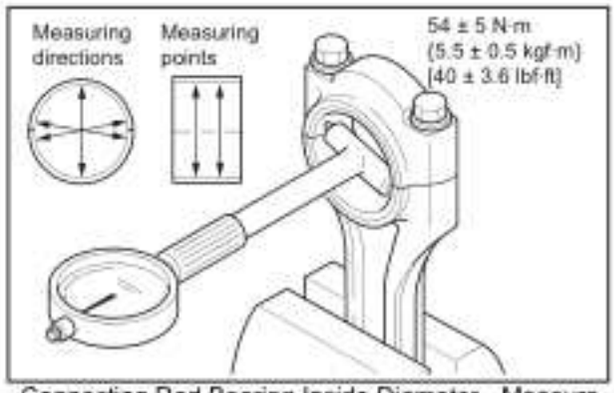
(4) Measure the crankpin outside diameter.

(5) Calculate the clearance from the difference between the inside diameter of the connecting rod bearing and outside diameter of the crankpin.

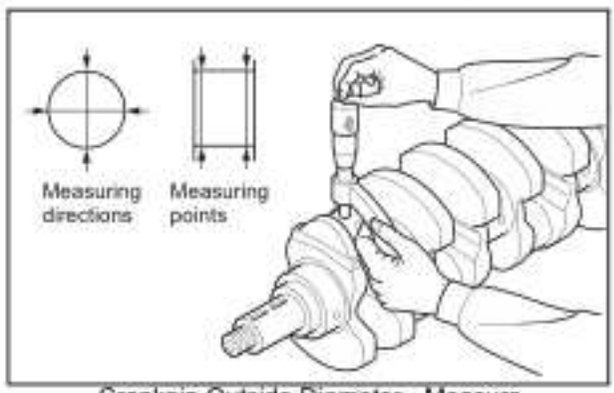
(6) If the clearance exceeds the limit, replace the connecting rod bearing with a new one.

(7) Measure the clearance between the connecting rod bearing and the crankpin again. Use the undersize bearing if the limit is exceeded.

(8) If an undersize bearing is used, grind the crankpin to the specified undersize.



Connecting Rod Bearing Inside Diameter - Measure

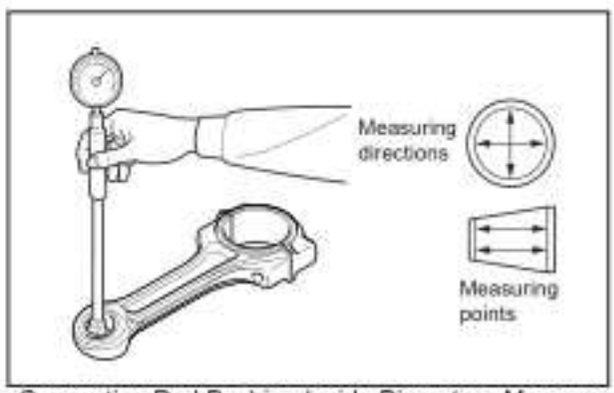


Crankpin Outside Diameter - Measure

Item	Nominal value	Standard value	Limit value
Crankpin outside diameter	ø60 mm [2.36 in.]	59.955 to 59.970 mm [2.3604 to 2.3610 in.]	59.800 mm [2.3543 in.]
Clearance between crankpin and Connecting rod (oil clearance)	-	0.030 to 0.071 mm [0.0012 to 0.0028 in.]	0.200 mm [0.0079 in.]

4.8 Clearance Between Connecting Rod Bushing and Piston Pin - Measure

Measure the inside diameter of the connecting rod bushing and the outside diameter of the piston pin. Replace if the limit is exceeded.



Connecting Rod Bushing Inside Diameter - Measure

Item	Nominal value	Standard value	Limit value
Bushing inside diameter	ø34 mm [1.34 in.]	34.020 to 34.055 mm [1.3394 to 1.3407 in.]	-
Clearance between connecting rod bushing and piston pin	-	0.02 to 0.06 mm [0.0008 to 0.0024 in.]	0.080 mm [0.0031 in.]

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5.
Remove valve casing (See Fig."Regulator exploded view")
Remove socket bolts (407) and remove valve casing (325) with solenoid proportional reducing valve (079).
Tools: Allen wrench: 5mm



Removing valve casing (325)

6.
Remove cover (See Fig. "Regulator exploded view")
Remove socket bolt (402) and cover (656).
Tools: Allen wrench: 5mm



Removing cover (656)

CAUTION

The cover is assembled with set screw (924) and hex nut (801), but do not loosen them. If they are loosened, the pressure settings change.

7.
Remove Pi sleeve and pilot piston
(See Fig."Regulator exploded view")
Draw out sleeve (631) and pilot piston (643) from the regulator body.



Removing Pi sleeve (631) and pilot piston (643)

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Warning Labels

CAUTION

Maintenance of Warning Labels

Make sure all warning/caution labels are legible.

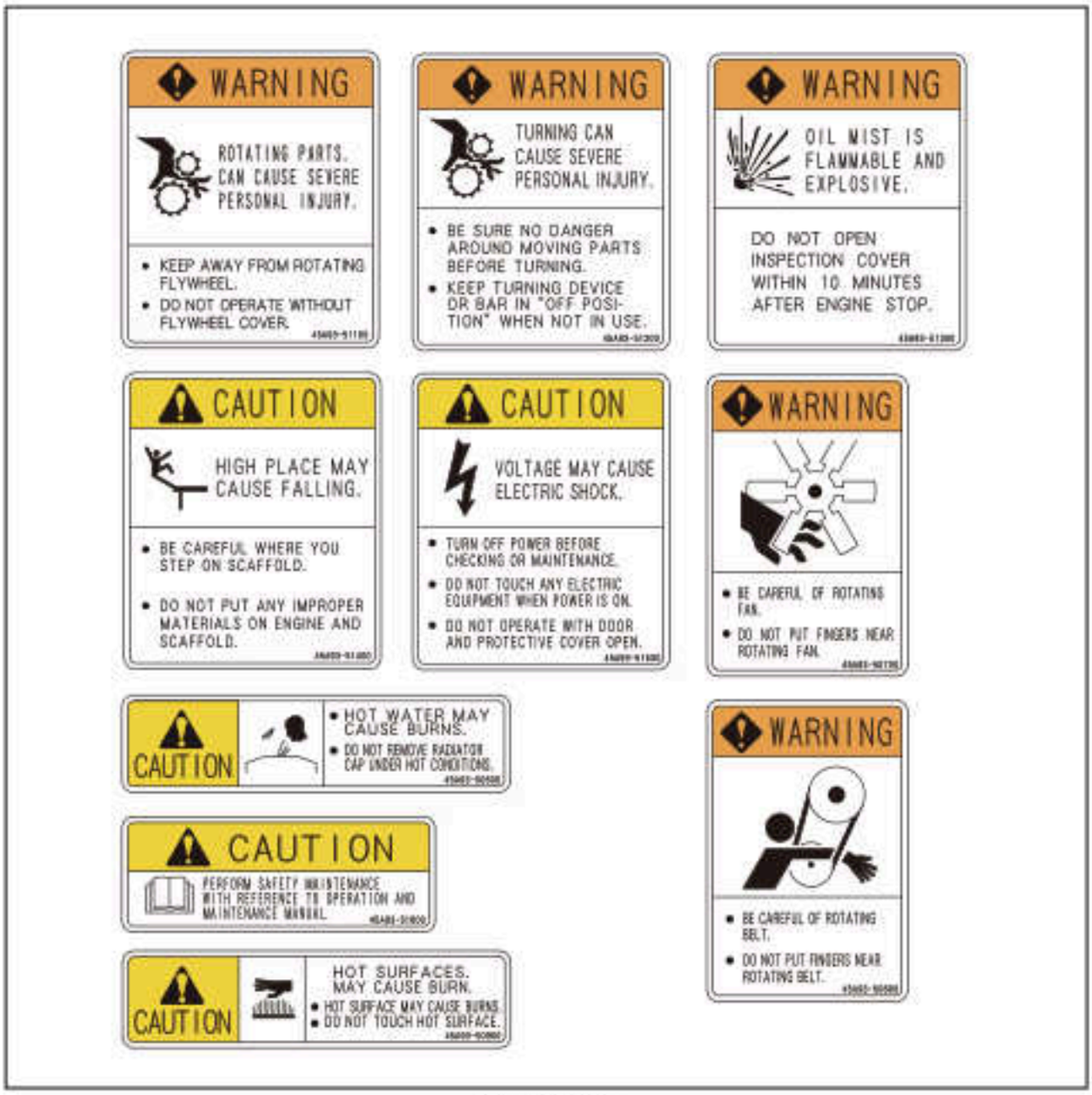
Clean or replace the warning or caution label when the description or illustration is not clear to read.

For cleaning the warning/caution labels, use a cloth, water and soap. Do not use cleaning solvent, gasoline or other chemicals to prevent the label from fading and peering.

Replace a damaged or missing label with a new one.

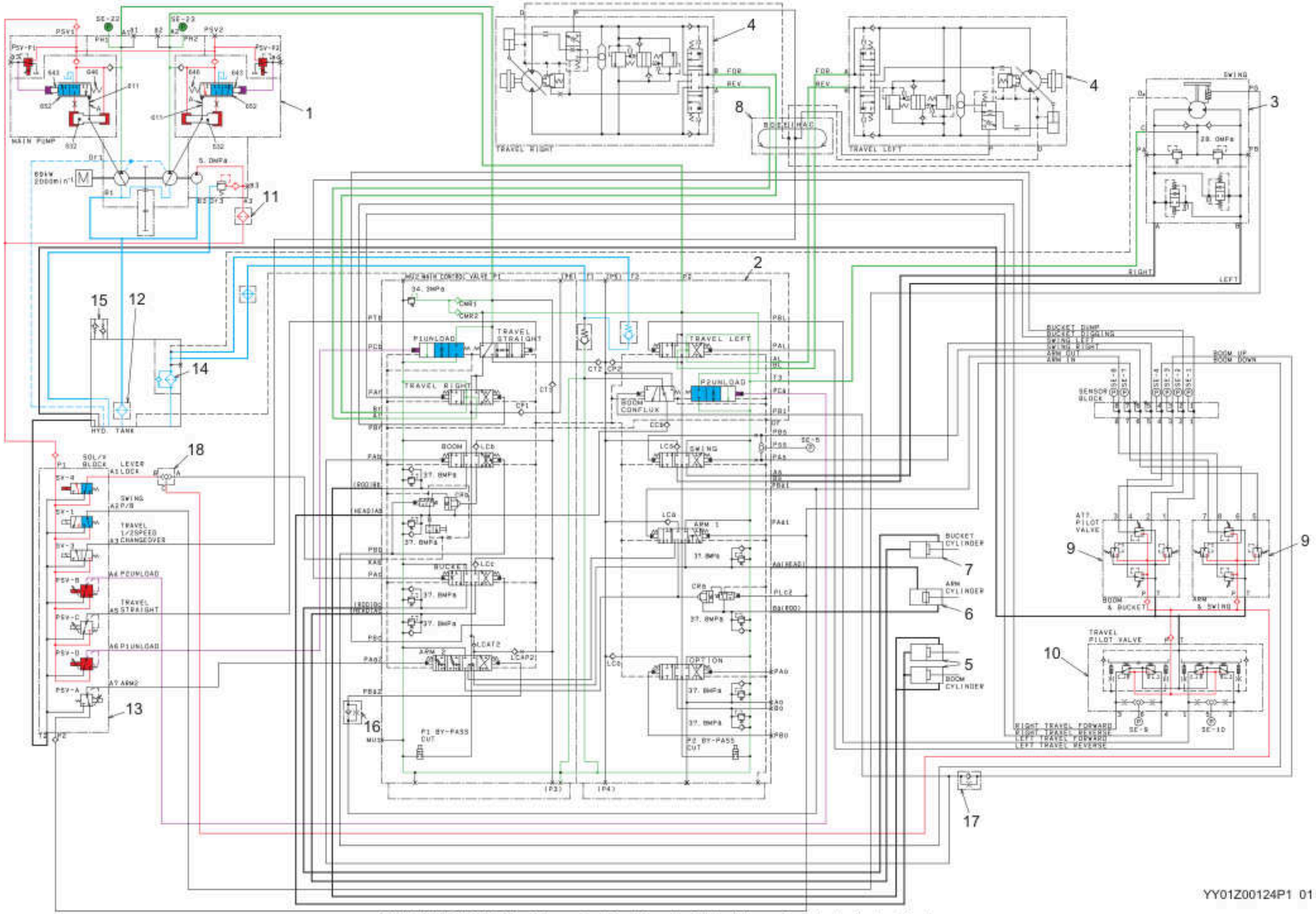
If any engine part stuck with a warning label is replaced with a new one, attach a new identical warning label to the new part.

To get new warning labels, contact our approved dealer.



Warning Labels

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YY01Z00124P1 01

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

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