SHOP MANUAL

KOMATSU

PW130-7K

MACHINE MODEL	SERIAL NUMBER
PW130-7K	**K40001 AND UP**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require.
  Materials and specifications are subject to change without notice.
- PW130-7K mount the SAA4D102E-2 engine.
  For details of the engine, see the 102 Series Engine Shop Manual.

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Category	Code	Part No.	Quantity	Container	Main applications, features
Gasket sealant	LG-4	790-129-9020	200 g	Tube	● Features: Resistance to water, oil ● Used as sealant for flange surface, thread. ● Also possible to use as sealant for flanges with large clearance. ● Used as sealant for mating surfaces of final drive case, transmission case.
	LG-5	790-129-9080	1 kg	Polyethylene container	● Used as sealant for various threads, pipe joints, flanges. ● Used as sealant for tapered plugs, elbows, nipples of hydraulic piping.
	LG-6	09940-00011	250 g	Tube	● Features: Silicon based, resistant to heat, cold. ● Used as sealant for flange surface, thread. ● Used as sealant for oil pan, final drive case, etc.
	LG-7	09920-00150	150 g	Tube	● Features: Silicon based, quick hardening type. ● Used as sealant for flywheel housing, intake manifold, oil pan, thermostat housing, etc.
	Three bond 1211	790-129-9090	100 g	Tube	● Used as heat-resisting sealant for repairing engines.
Molybdenum disulphide lubricant	LM-G	09940-00051	60 g	Can	● Used as lubricant for sliding parts (to prevent squeaking).
	LM-P	09940-00040	200 g	Tube	● Used to prevent seizure or scuffing of the thread when press fitting or shrink fitting. ● Used as lubricant for linkage, bearings, etc.
Grease	G2-LI	SYG2-400LI SYG2-350LI SYG2-400LI-A SYG2-160LI SYGA160CNLI	Various	Various	● General purpose type
	G2-CA	SYG2-400CA SYG2-350CA SYG2-400CA-A SYG2-160CA SYG2-160CNCA	Various	Various	● Used for normal temperature, light load bearing at places in contact with water or steam.
	Molybdenum disulphide lubricant	SYG2-400M	400 g (10 per case)	Belows type	● Used for places with heavy load.

Temperature

Fahrenheit Centigrade Conversion; a simple way to convert a Fahrenheit temperature reading into a Centigrade temperature reading or vise versa is to enter the accompanying table in the center or boldface column of figures. These figures refer to the temperature in either Fahrenheit or Centigrade degrees. If it is desired to convert from Fahrenheit to Centigrade degrees, consider the center column as a table of Fahrenheit temperatures and read the corresponding Centigrade temperature in the column at the left. If it is desired to convert from Centigrade to Fahrenheit degrees, consider the center column as a table of Centigrade values, and read the corresponding Fahrenheit temperature on the right.

°C		°F	°C		°F	°C		°F	°C		°F
-40.4	-40	-40.0	-11.7	11	51.8	7.8	46	114.8	27.2	81	117.8
-37.2	.35	-31.0	-11.1	12	53.6	8.3	47	116.6	27.8	82	179.6
-34.4	-30	-22.0	-10.6	13	55.4	8.9	48	118.4	28.3	83	181.4
-31.7	-25	-13.0	-10.0	14	57.2	9.4	49	120.2	28.9	84	183.2
-28.9	-20	-4.0	-9.4	15	59.0	10.0	50	122.0	29.4	85	185.0
-28.3	-19	-2.2	-8.9	16	60.8	10.6	51	123.8	30.0	86	186.8
-27.8	-18	-0.4	-8.3	17	62.6	11.1	52	125.6	30.6	87	188.6
-27.2	-17	1.4	-7.8	18	64.4	11.7	53	127.4	31.1	88	190.4
-26.7	-16	3.2	-7.2	19	66.2	12.2	54	129.2	31.7	89	192.2
-26.1	-15	5.0	-6.7	20	68.0	12.8	55	131.0	32.2	90	194.0
-25.6	-14	6.8	-6.1	21	69.8	13.3	56	132.8	32.8	91	195.8
-25.0	-13	8.6	-5.6	22	71.6	13.9	57	134.6	33.3	92	197.6
-24.4	-12	10.4	-5.0	23	73.4	14.4	58	136.4	33.9	93	199.4
-23.9	-11	12.2	-4.4	24	75.2	15.0	59	138.2	34.4	94	201.2
-23.3	-10	14.0	-3.9	25	77.0	15.6	60	140.0	35.0	95	203.0
-22.8	-9	15.8	-3.3	26	78.8	16.1	61	141.8	35.6	96	204.8
-22.2	-8	17.6	-2.8	27	80.6	16.7	62	143.6	36.1	97	206.6
-21.7	-7	19.4	-2.2	28	82.4	17.2	63	145.4	36.7	98	208.4
-21.1	-6	21.2	-1.7	29	84.2	17.8	64	147.2	37.2	99	210.2
-20.6	-5	23.0	-1.1	30	86.0	18.3	65	149.0	37.8	100	212.0
-20.0	-4	24.8	-0.6	31	87.8	18.9	66	150.8	40.6	105	221.0
-19.4	-3	26.6	0	32	89.6	19.4	67	152.6	43.3	110	230.0
-18.9	-2	28.4	0.6	33	91.4	20.0	68	154.4	46.1	115	239.0
-18.3	-1	30.2	1.1	34	93.2	20.6	69	156.2	48.9	120	248.0
-17.8	0	32.0	1.7	35	95.0	21.1	70	158.0	51.7	125	257.0
-17.2	1	33.8	2.2	36	96.8	21.7	71	159.8	54.4	130	266.0
-16.7	2	35.6	2.8	37	98.6	22.2	72	161.6	57.2	135	275.0
-16.1	3	37.4	3.3	38	100.4	22.8	73	163.4	60.0	140	284.0
-15.6	4	39.2	3.9	39	102.2	23.3	74	165.2	62.7	145	293.0
-15.0	5	41.0	4.4	40	104.0	23.9	75	167.0	65.6	150	302.0
-14.4	6	42.8	5.0	41	105.8	24.4	76	168.8	68.3	155	311.0
-13.9	7	44.6	5.6	42	107.6	25.0	77	170.6	71.1	160	320.0
-13.3	8	46.4	6.1	43	109.4	25.6	78	172.4	73.9	165	329.0
-12.8	9	48.2	6.7	44	111.2	26.1	79	174.2	76.7	170	338.0
-12.2	10	50.0	7.2	45	113.0	26.7	80	176.0	79.4	175	347.0

1 PIECE BOOM

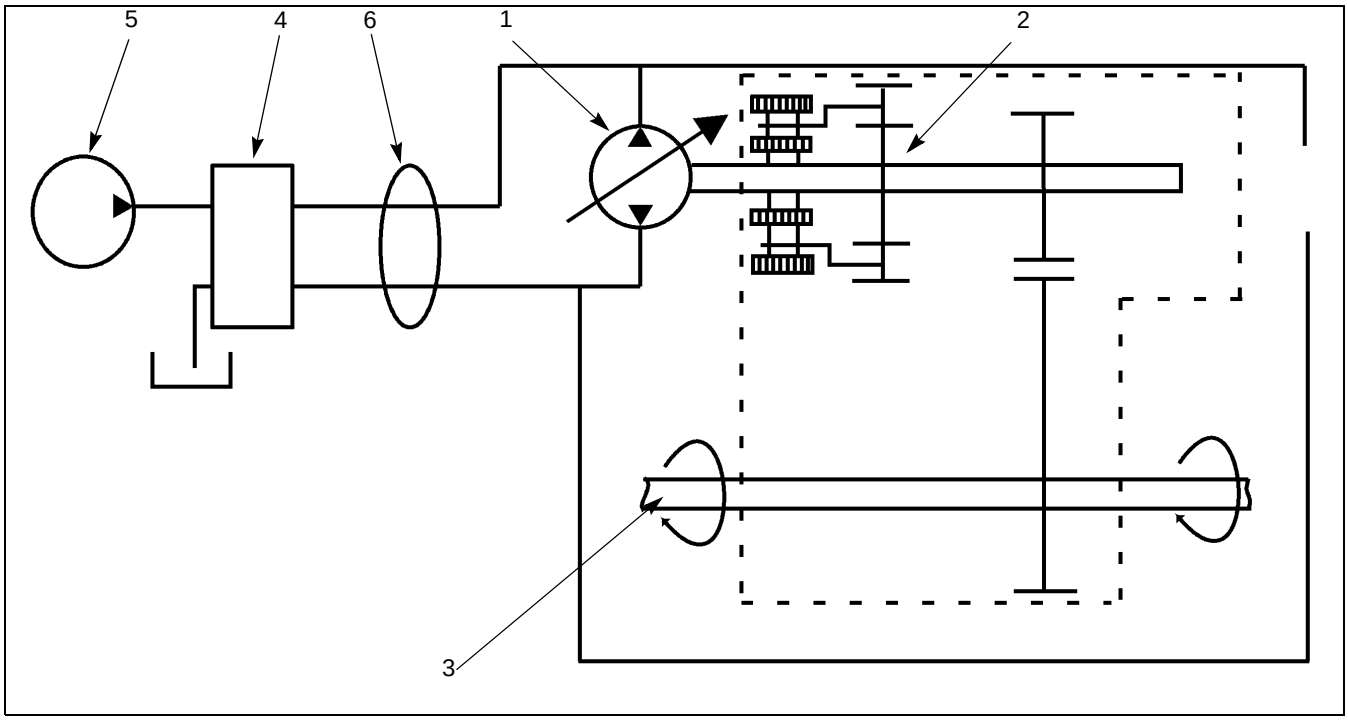
Unit: kg

Machine model		PW130-7K
Serial Number		K40001 and up
Boom assembly		980
Arm assembly	2.1m	291
	2.5m	328
	3.0m	442
Bucket assembly		460
Lift cylinder	Left Hand	135
	Right Hand	135
Arm cylinder assembly		140
Bucket cylinder assembly	2.1m	90
	2.5m	
	3.0m	
Link / pins assembly		112.8
Boom pin		20+12
Arm pin		12

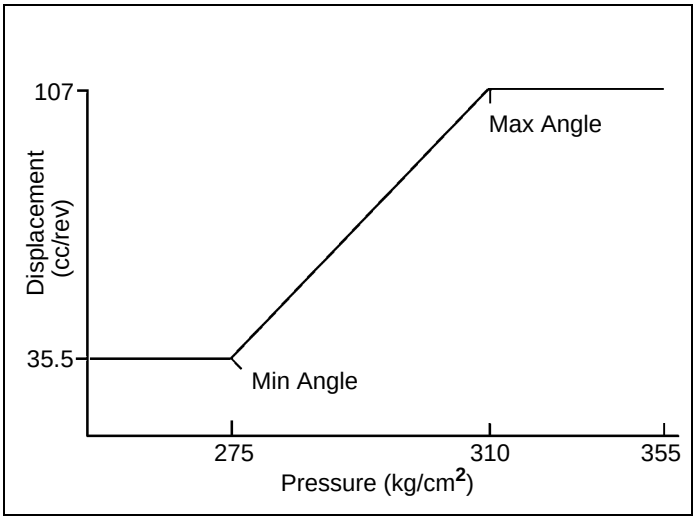
1. Front axle
2. Centre swivel joint
3. Swing circle
4. Swing motor / machinery
5. Hydraulic / Fuel tank
6. Main pump
7. Gear pump
8. Rear axle
9. Travel direction solenoid valve
10. Accumulators
11. Clutch control valve
12. Main control valve
13. Engine
14. Priority valve
15. Transmission
16. Travel motor
17. Propshaft
18. Power brake valve

OPERATION OF TRAVEL MOTOR

1. During normal travel

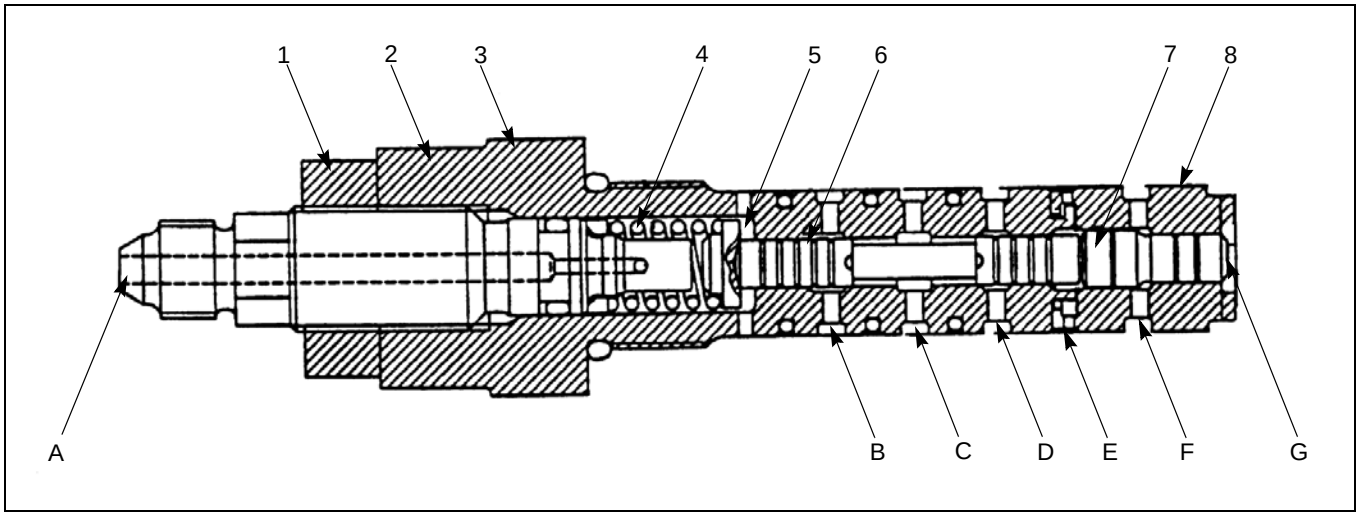


1. Travel motor
2. Transmission and clutch
3. Drive shafts
4. Main control valve
5. Main pump
6. Swivel joint



- Oil is supplied to the travel motor from the control valve by the travel spool. When the spool is opened the machine accelerates from the stationary the pressure at the travel motor rises to maximum. This high pressure is used to set the displacement of the travel motor to maximum to give maximum torque.
- As the machine speed increases, so pressure required to move the machine will reduce. This reducing pressure is used to reduce the displacement of the travel motor to allow increasing speed. The travel motor changes from maximum displacement to preset minimum. Displacement changes according to the diagram.

LS VALVE

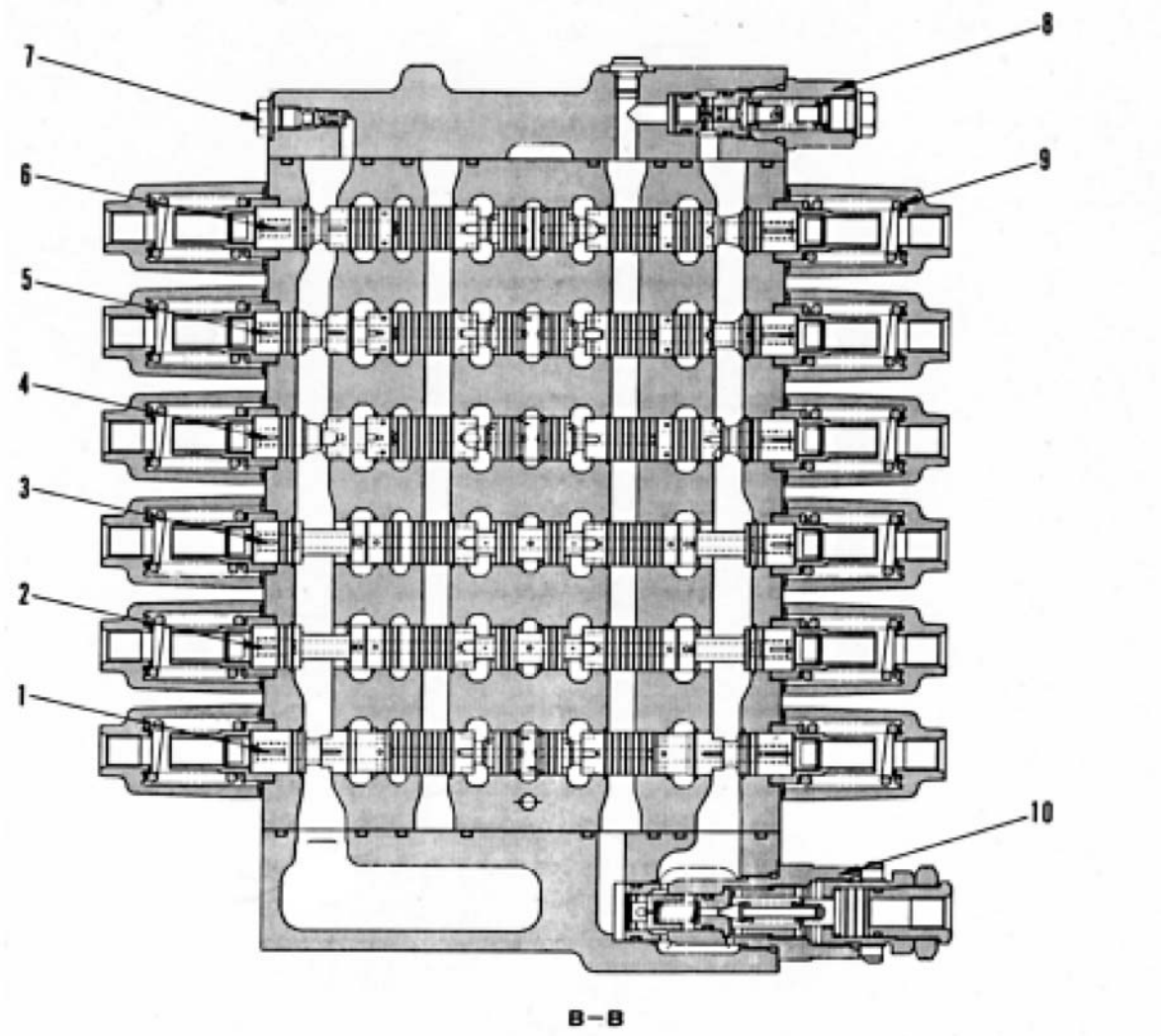


A. Port **PLS** (Control valve LS pressure inlet port)
B. Port **PA** (Pump delivery pressure inlet port)
C. Port **PLP** (LS valve signal pressure outlet port)
D. Port **PPL** (PC valve signal pressure inlet port)
E. Port **Pa** (Drain pressure outlet port)
F. Port **PSIG** (LS control EPC valve pressure inlet port)
G. Port **PA** (Pump delivery pressure inlet port)

1. Plug
2. Locknut
3. Sleeve
4. Spring
5. Seat
6. Spool
7. Piston
8. Sleeve

- When pump pressure **PP** is small, spool (3) is on the left. At this point, port **C** and port **D** are connected, and the pressure entering the LS valve becomes drain pressure **PT**. If port E and port **G** of the LS valve are connected (see (1) LS valve), the pressure entering the large diameter end of the piston from port **J** becomes drain pressure **PT**, and servo piston (9) moves to the right. In this way, the pump discharge amount moves in the direction of increase.
- As servo piston (9) moves further, piston (7) is moved to the right by slider (8). Springs (4) and (6) expand and the spring force becomes weaker. When spring force becomes weaker, spool (3) moves to the right, so the connection between port **C** and port **D** is cut, and the pump discharge pressure ports **B** and **C** are connected. As a result, the pressure at port **C** rises, and the pressure at the large diameter end of the piston also rises, so the movement of piston (9) to the right is stopped.

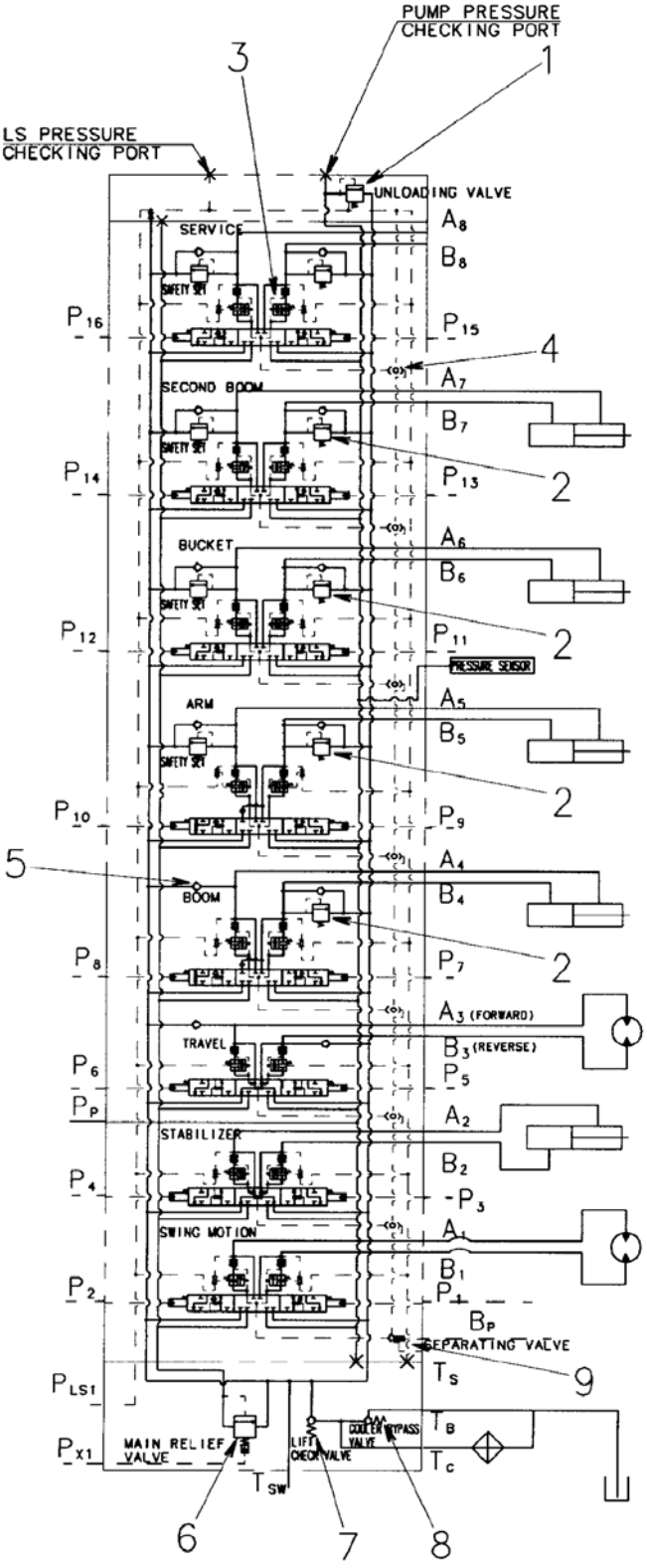
In other words, the stop position for piston (9) (= pump discharge amount) is decided at the point where the force of springs (4) and (6) and the pushing force from the PC-EPC valve solenoid and the pushing force created by pressure PP acting on spool (3) are in balance.



1. Spool (swing)
2. Spool (stabilizer)
3. Spool (travel)
4. Spool (boom)
5. Spool (arm)
6. Spool (bucket)
7. LS bypass plug
8. Unload valve
9. Spool return spring
10. Main relief valve

3. Operation for each function and valve

Hydraulic circuit diagram and name of valves

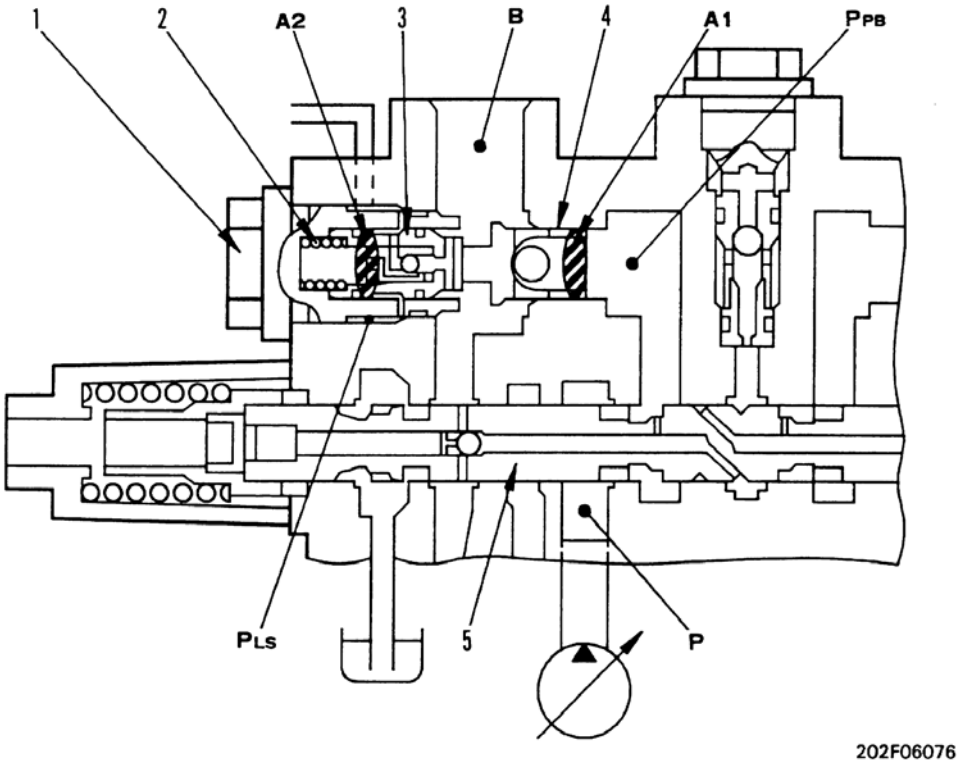


1. Unload valve
   (LS pressure + 2.45 MPa (25 kg/cm^2)
2. Safety-suction valve
   (35.8 MPa (365 kg/cm^2)
   Arm, Bucket & 2nd Boom
   (33.3 MPa (340 kg/cm^2)
3. Pressure compensation valve
4. LS shuttle valve
5. Suction valve
6. Main relief valve
   (normal: 31.85 MPa (325 kg/cm^2)),
   when pressure rises: 34.79 Map (355 kg/cm^2))
7. Lift check valve:
   (cracking pressure: 0.2 MPa (2.0 kg/cm^2))
8. Bypass check valve
9. LS select valve

6) Surface area ratio of pressure compensation valve

Function

- The pressure compensation valve determines the compensation characteristics by carrying out fine adjustment of the area ratio (**A2/A1**) between area **A2** of piston (3) and area **A1** of valve (4) to match the characteristics of each actuator.



- **Area ratio (A2/A1) and compensation characteristics**

  When ratio is 1.00: spool meter-in downstream pressure **PPB** = Max. load pressure **B**, and oil flow is divided in proportion to area of opening of spool.

  When ratio is more than 1.00: spool meter-in downstream pressure **PPB** > Max. load pressure **B**, and oil flow is divided in a proportion less than area of opening of spool.

  When ratio is less than 1.00: spool meter-in downstream pressure **PPB** < Max. load pressure **B**, and oil flow is divided in a proportion more than area of opening of spool.

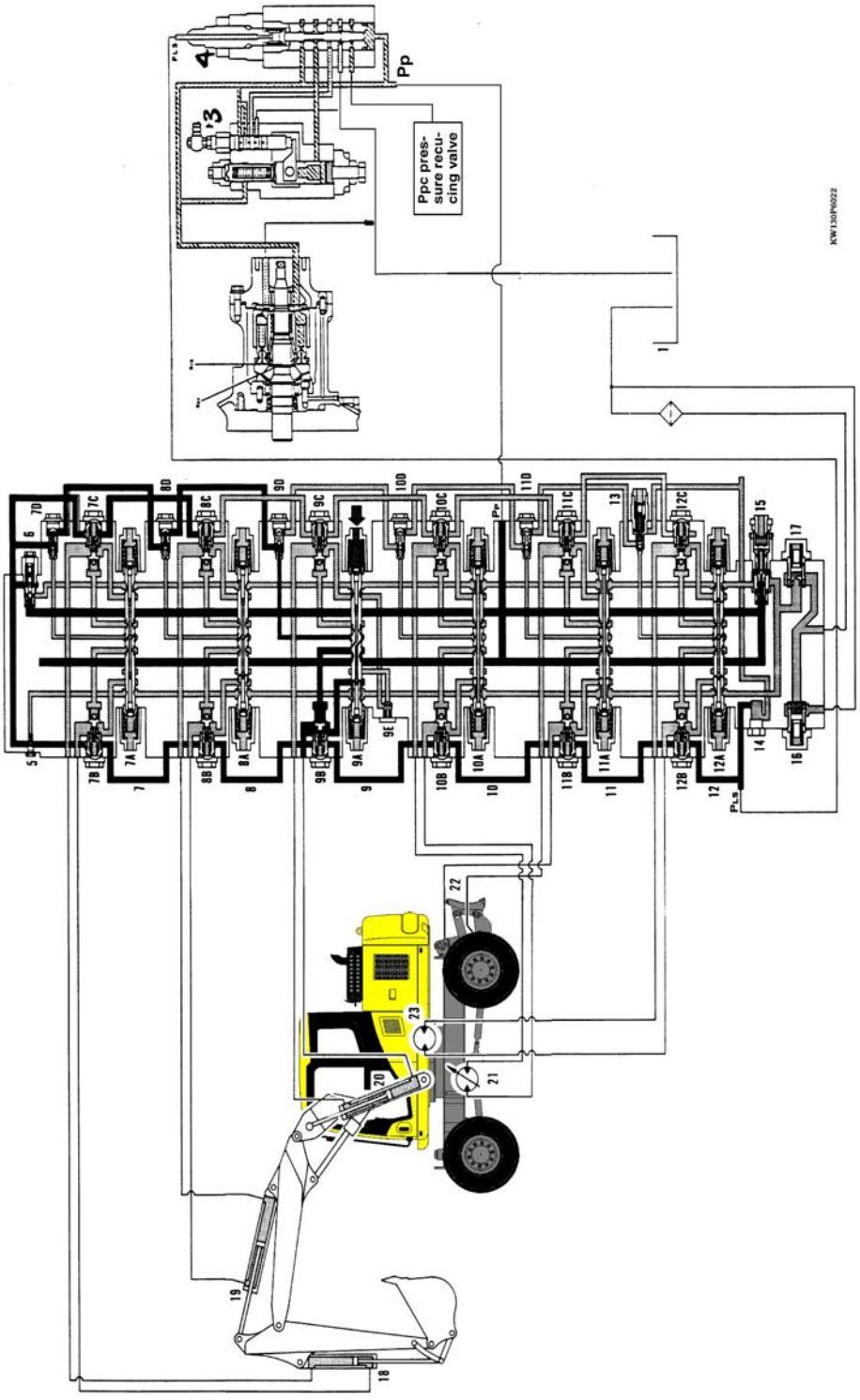
★ Spool meter-in downstream pressure **PPB** acts on area **A1** of valve (4), and max. load pressure **B** (=LS pressure **PLS**) acts on area **A2** of piston (3).

- **Area ratio of each pressure compensation valve**

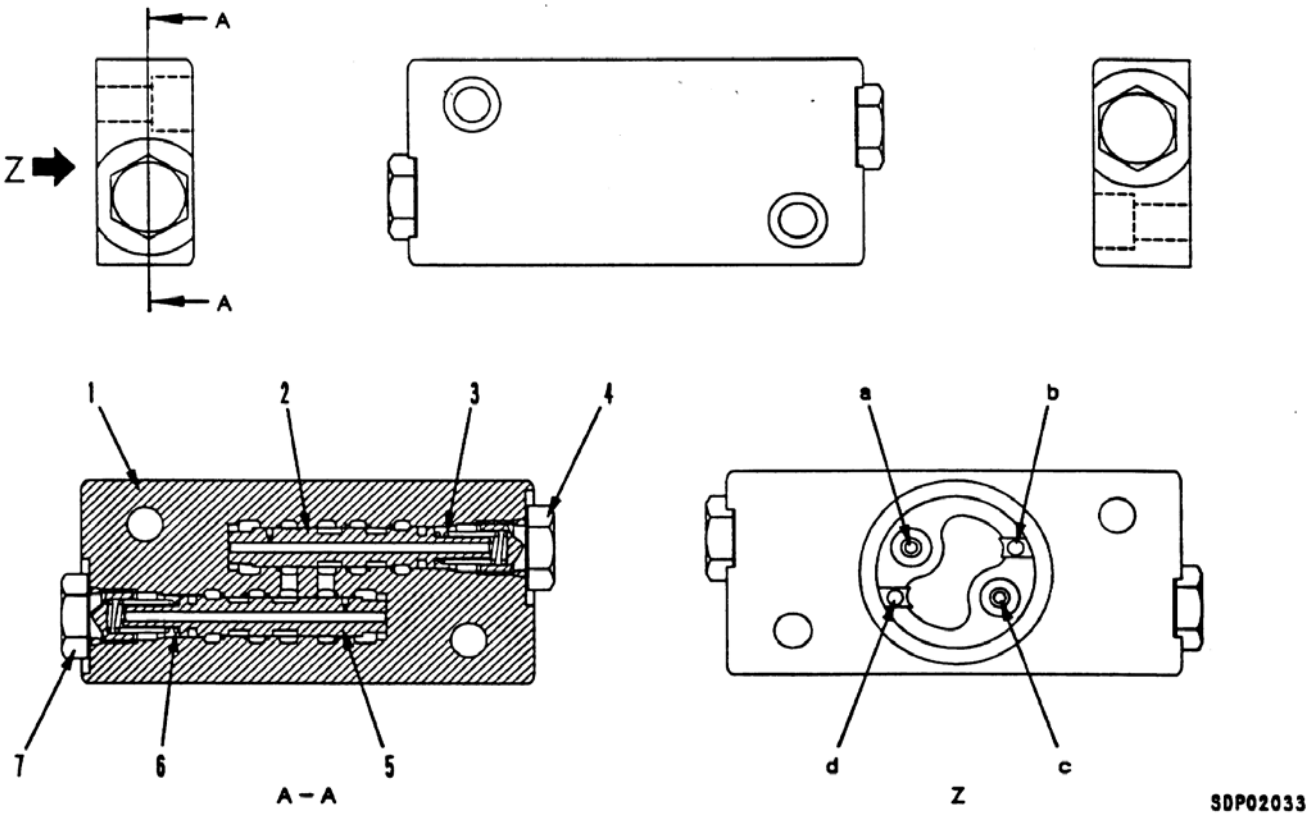
Valve	Port A		Port B		Remarks
Service		1.00		1.00	
Bucket	DUMP	1.00	CURL	1.00	
Arm	OUT	0.96	IN	0.98	
Boom	RAISE	0.96	LOWER	1.00	
Travel	FOR-WARD	1.00	RE-VERSE	1.00	Throttle ø0.6, without shuttle valve
Stabilizer	RAISE	1.00	LOWER	1.00	
Swing	LEFT	0.98	RIGHT	0.98	Throttle ø0.6

1. Pressure compensation valve
2. Spring
3. Piston
4. Valve
5. Spool

A1: Cross-sectional area of valve
A2: Cross-sectional area of piston
B: Actuator circuit (pressure)
Pp: Pump circuit (pressure)
PPB: Spool meter-in upstream pressure

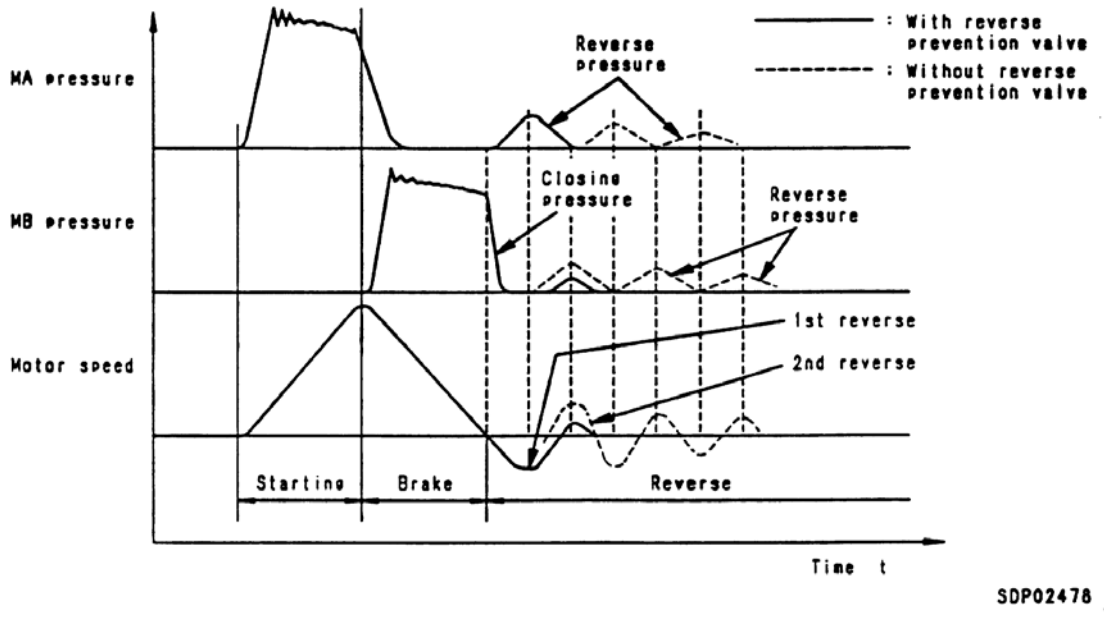

Pp
Ppc pressure reducing valve
KW130P60222

REVERSE FLOW CHECK VALVE

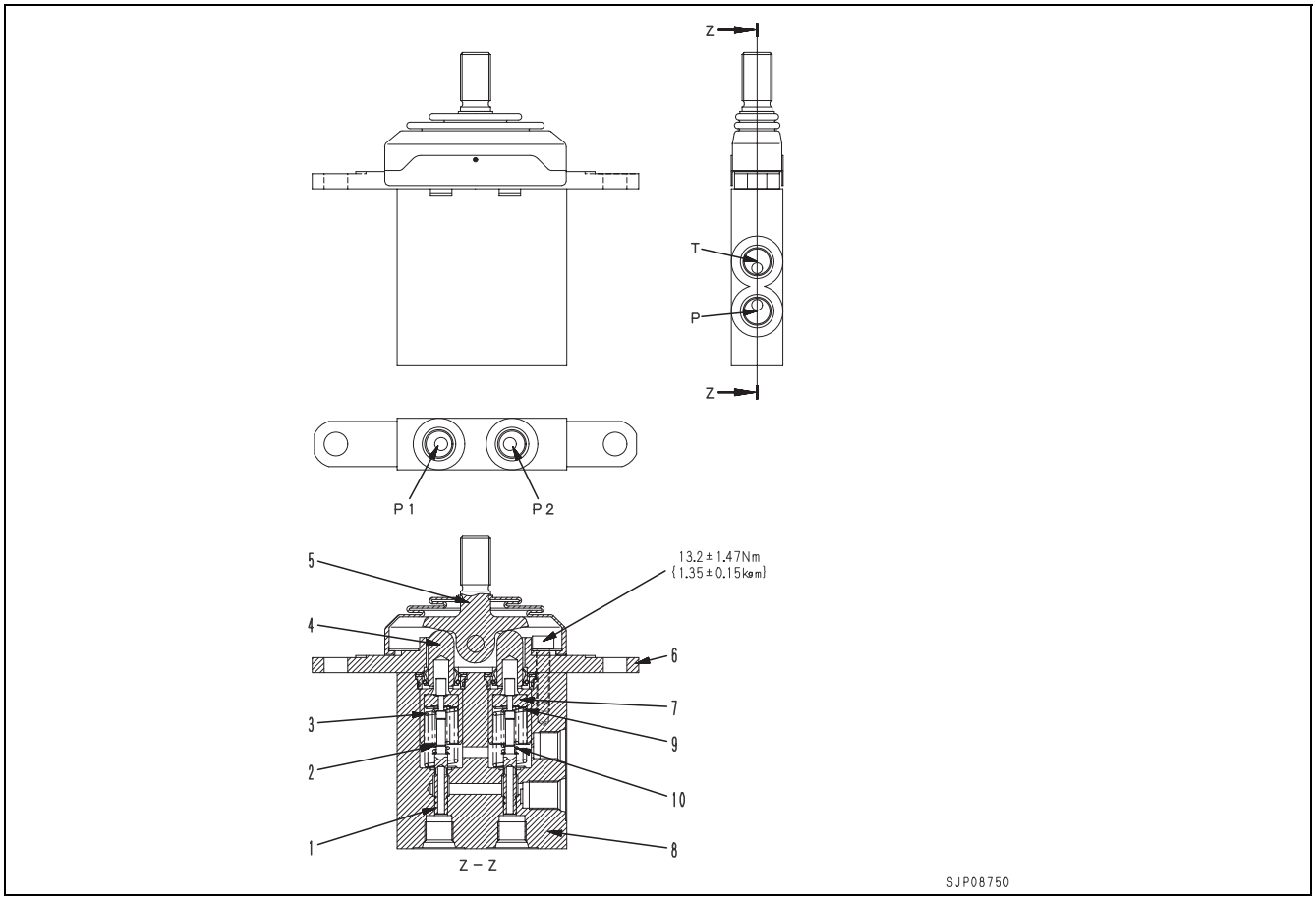


1. Valve body
2. Spool (MA side)
3. Spring (MA side)
4. Plug (MA side)
5. Spool (MB side)
6. Spring (MB side)
7. Plug (MB side)

a. Ma port
b. T1 port
c. MB port
d. T2 port



SERVICE PPC VALVE



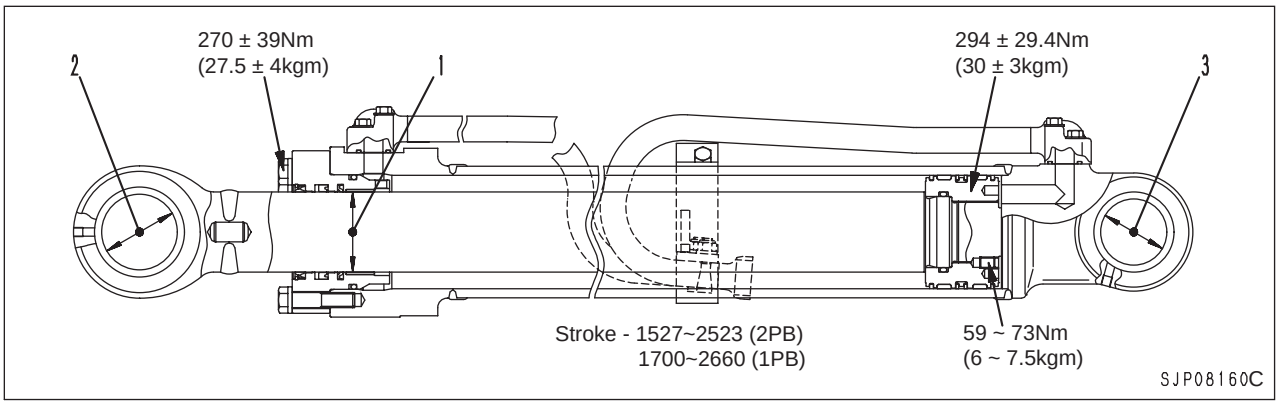
1.	Spool	T.	To tank	5.	Lever
2.	Metering spring	P.	From main pump	6.	Plate
3.	Centering spring	P1.	Port	7.	Retainer
4.	Piston	P2.	Port	8.	Body

Unit: mm

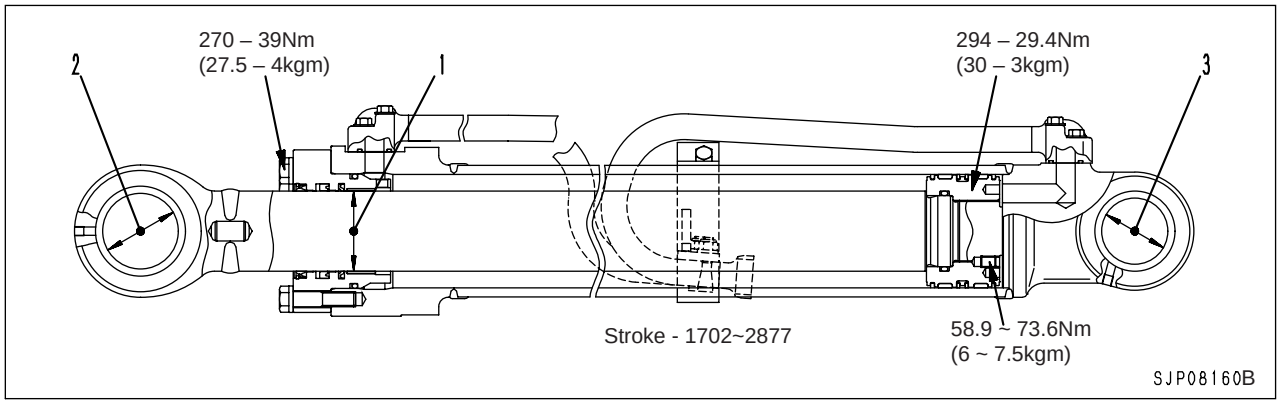
No.	Check item	Criteria					Remedy
9	Centering spring	Standard size			Repair limit		If damaged or deformed, replace spring
		Free length x Out-side diameter	Installed length	Installed load	Free length	Installed load	
		33.9 x 15.3	28.4	124.5 N {12.7 kg}	—	100 N {10.2 kg}	
10	Metering spring	22.7 x 8.1	22	16.7 N {1.7 kg}	—	13.7 N {1.4 kg}	

HYDRAULIC CYLINDER

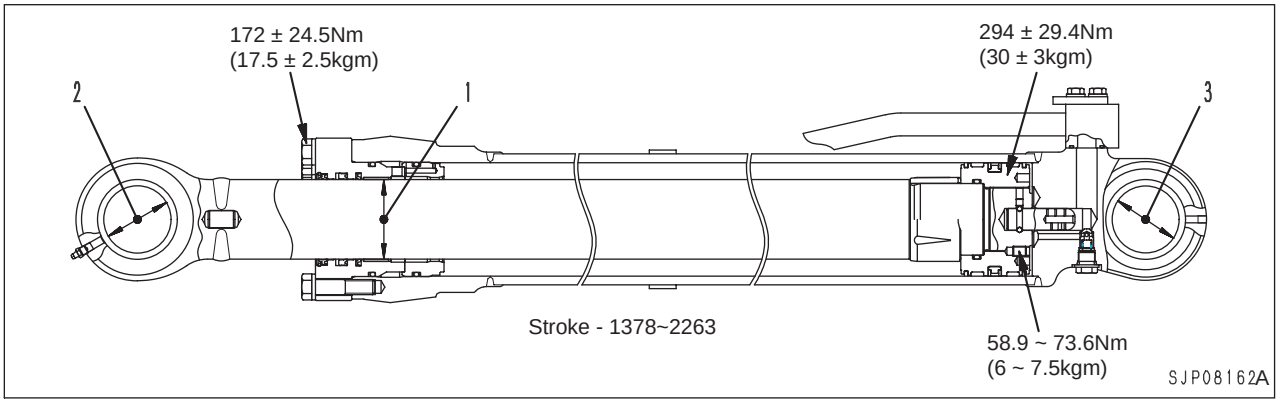
BOOM CYLINDER



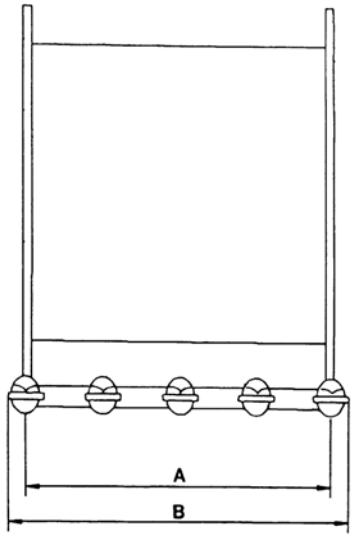
ARM CYLINDER



BUCKET CYLINDER



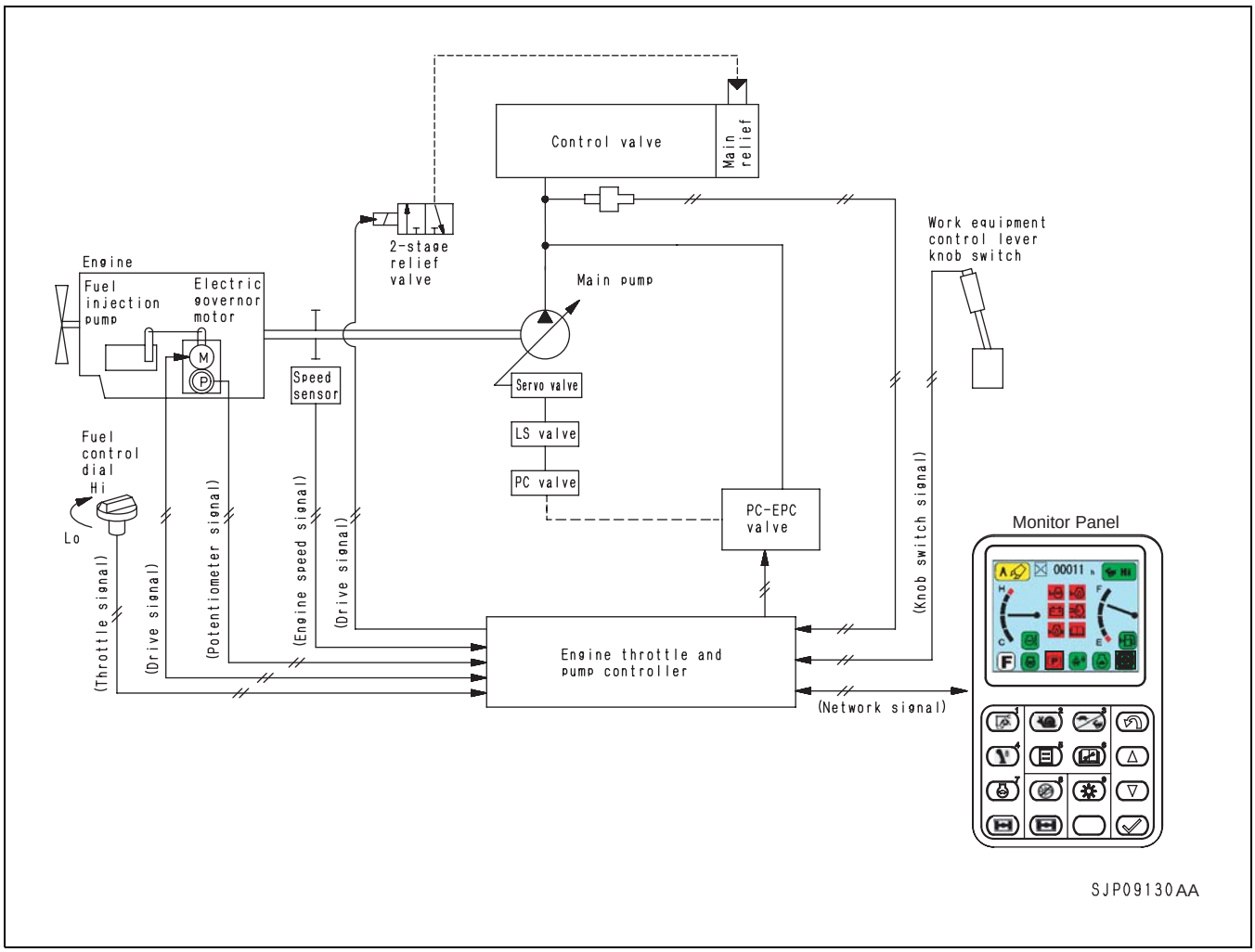
BUCKET CAPACITIES



KW130P6170

WIDTH A (mm)	WIDTH B (mm)	CAPACITIES (LITRES) SAE/CECE
450	500	235/220
500	550	275/255
550	600	315/290
600	650	350/325
650	700	390/360
700	750	430/395
750	800	470/425
800	850	510/460
850	900	550/495
900	950	590/530
950	1000	630/570
1000	1050	675/605
1050	1100	715/640
1100	1150	755/675
1150	1200	795/710
1200	1250	840/745

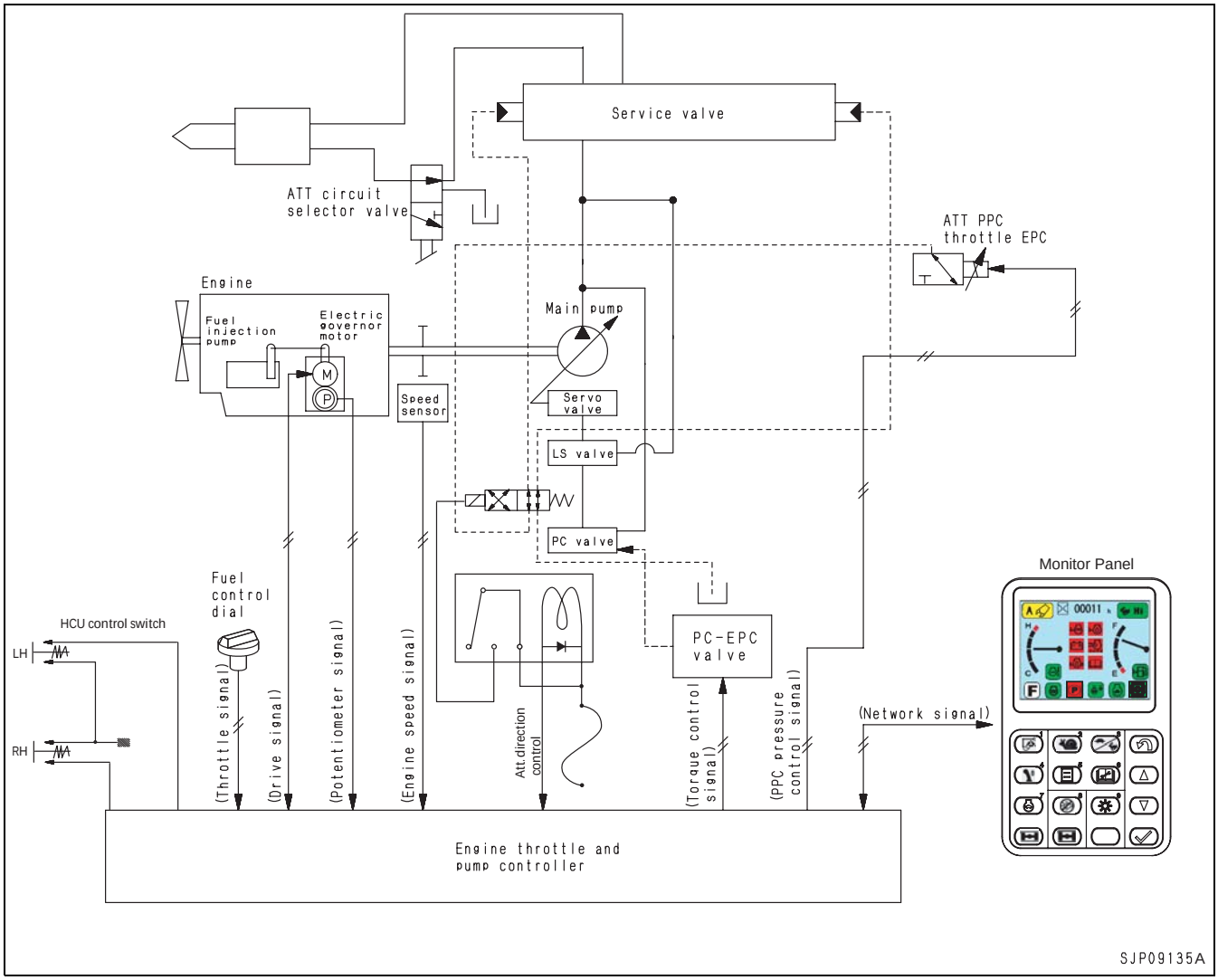
3. One-touch power maximizing function



FUNCTION

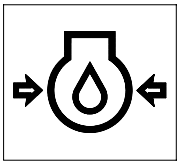
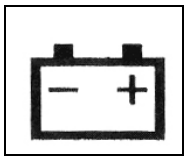
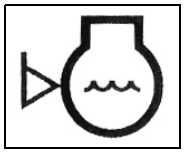
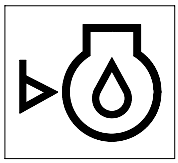
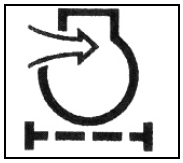
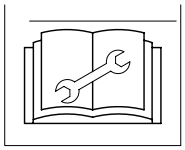
- Power can be increased for approximately 8 seconds by depressing the power max switch on LH work equipment lever.
- The power max function is available in "A" and "E" working modes only.

8. ATT flow control, circuit selector function (option)



Checks before starting (caution lamps all light up), when maintenance interval is exceeded.

If the checks before starting or maintenance interval is exceeded items light up, the display of the hydraulic oil temperature gauge and the hydraulic oil temperature monitor are stopped, and the following cautions are displayed.

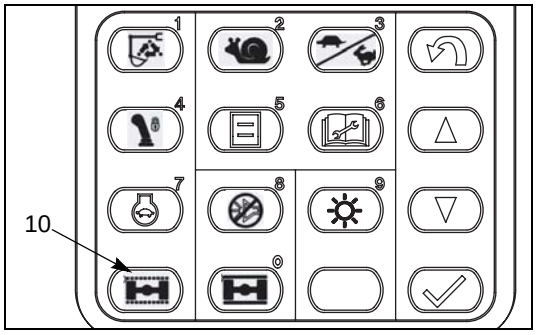
Symbol	Display item	Check before starting item	When engine is stopped	When engine is running
	Engine oil pressure	Yes	--	When abnormal, lights up and buzzer sounds
	Battery charge	Yes	--	Lights up when abnormal
	Radiator water level	Yes	Lights up when abnormal	When abnormal, lights up and buzzer sounds
	Engine oil level	Yes	Lights up when abnormal	--
	Air cleaner clogging	Yes	--	Lights up when abnormal
	Maintenance	No	Lights up when maintenance is due. Lights up for only 30 sec. after key is turned ON, then goes out.	

The problems that have occurred are displayed in order from the left.

When the above cautions are displayed, if the hydraulic oil temperature is high or low, only the symbol is displayed.

Condition of hydraulic oil	Colour of symbol
Low temperature (below B6 or equivalent)	Black on white background
Normal (B6 - B2)	No display
High temperature (below B2)	White on red letters

10. AUTOMATIC SUSPENSION LOCK SWITCH



Release the front axle suspension lock, using switch.

Press switch (10) for Front axle suspension 'auto' mode i.e. when travel pedal is depressed, front axle suspension travels freely and when travel pedal is not depressed, front axle suspension is locked, as long as machine is stationary. To disengage press (10) again.

The auto suspension lock indicator will illuminate when automatic suspension lock is selected.

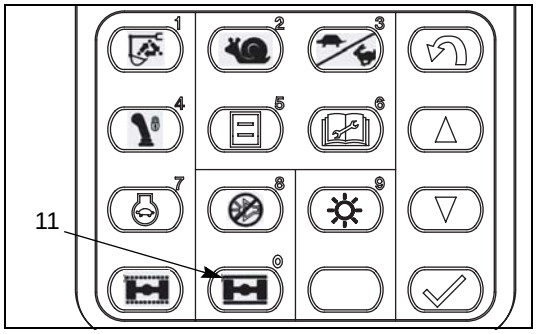
⚠ WARNING

Take care when using undercarriage attachments to stabilize the machine, and suspension lock simultaneously, as locked front axle may suddenly become free.

REMARK

Permanent and automatic suspension lock cannot be active at the same time. Each mode can be turned on and off by their individual switches.

11. PERMANENT SUSPENSION LOCK SWITCH

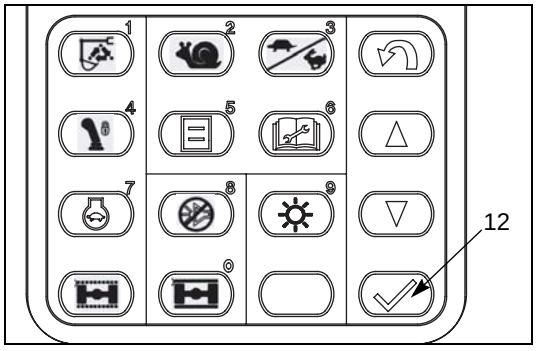


Press switch (11) in order to engage permanent front axle lock. Front axle will be fixed in place when engaged, the permanent suspension lock indicator will illuminate. To disengage lock, press switch (11) again.

REMARK

When front axle is locked it is not possible to travel in high. If high speed travel is selected, axle will not lock.

12. INPUT CONFIRMATION SWITCH



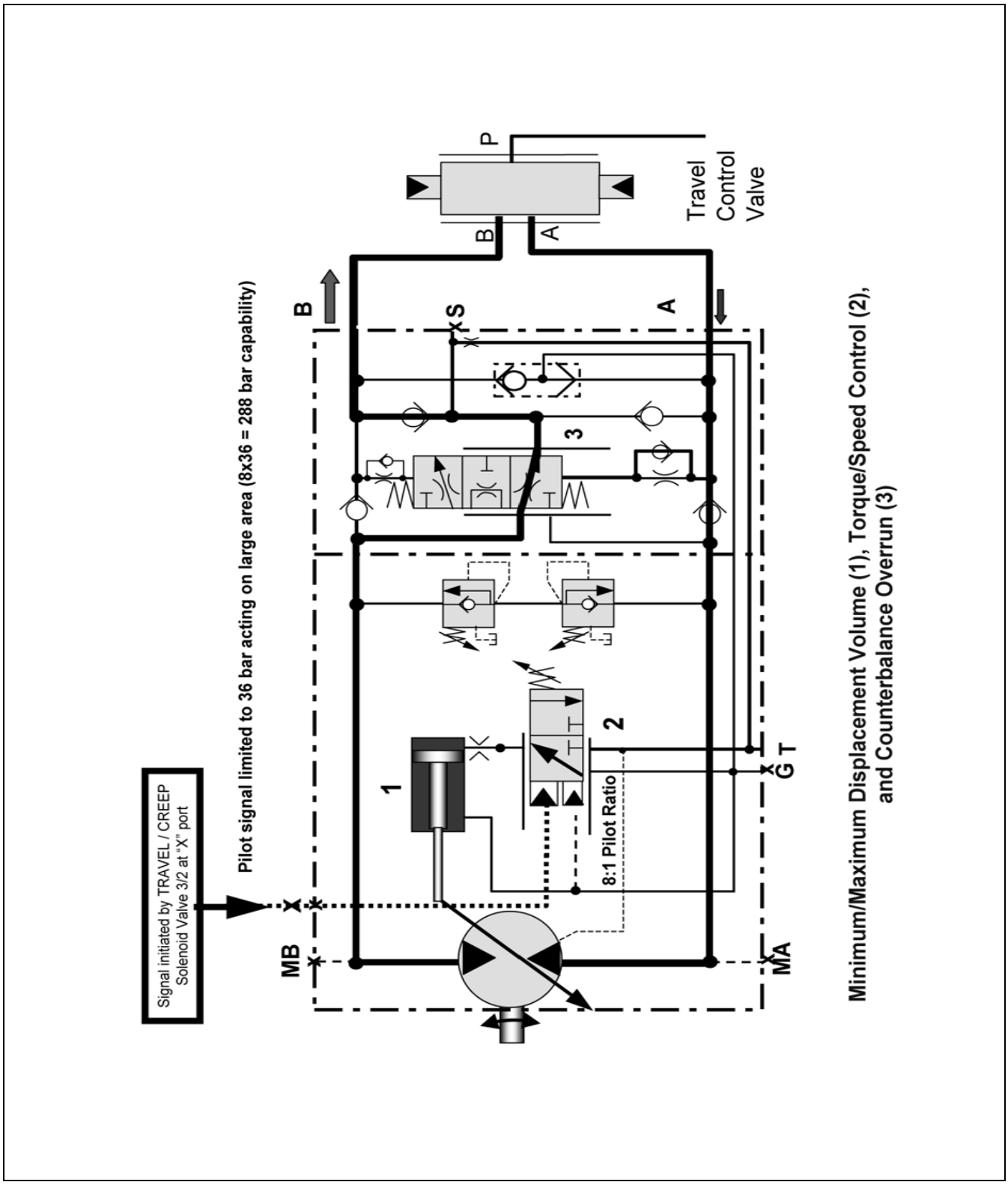
Press this switch (12) to confirm the selected mode when in the maintenance mode, brightness/contrast adjustment mode, or select mode.

SENSOR

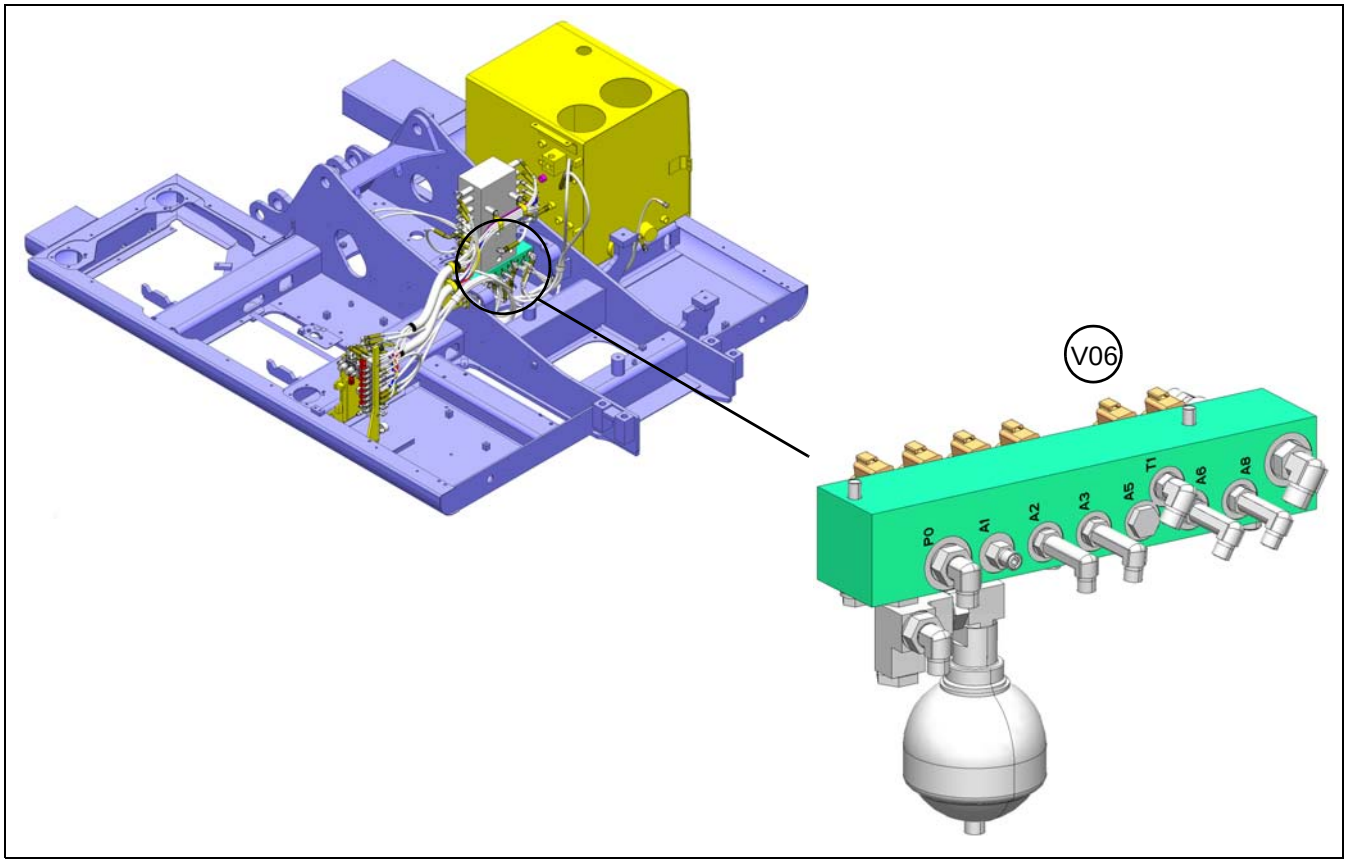
- The signals from the sensors are input to the panel directly. Either side of a sensor of contact type is always connected to the chassis ground.

Sensor name	Type of sensor	When normal	When abnormal
Engine oil level	Contact	ON (Closed)	OFF (Open)
Engine oil pressure	Contact	OFF (Open)	ON (Closed)
Hydraulic oil temperature	Resistance	—	—
Coolant temperature	Resistance	—	—
Fuel level	Resistance	—	—
Air cleaner clogging	Contact	OFF (Closed)	ON (Open)

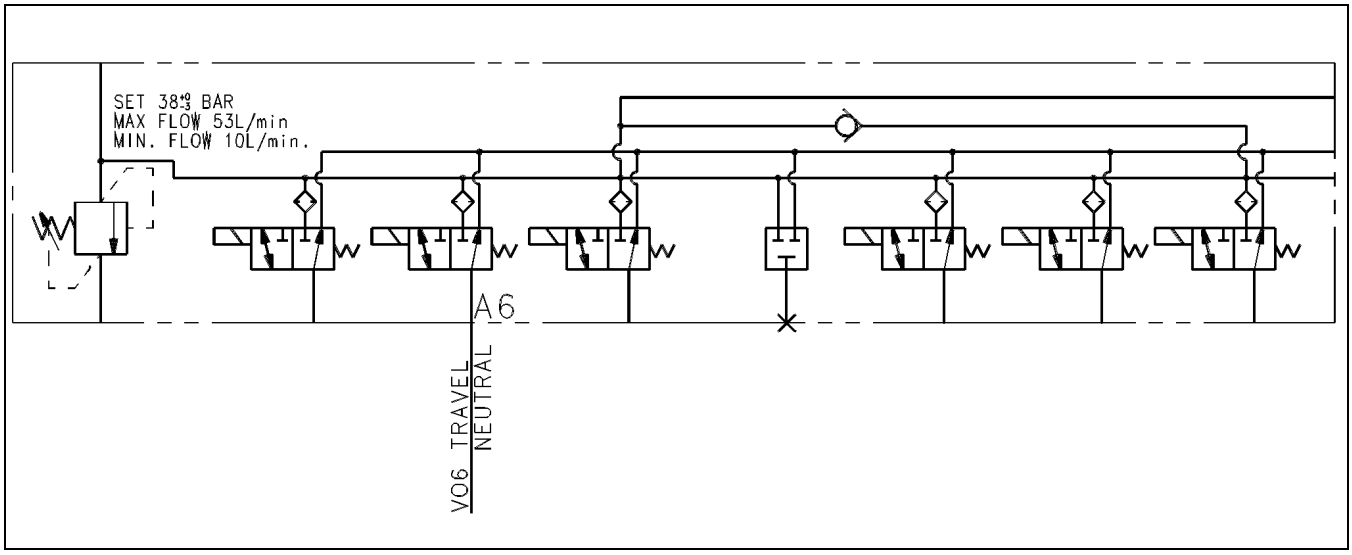
1.3. Introduction of Creep control: High Torque - Low Speed.
It can be seen from the diagram that the spool moves across on the torque speed control valve (2) which directs the flow to move the servo and supply the motor displacement to maximum giving creep speed of 2.2kph



5. Travel / Neutral Solenoid.

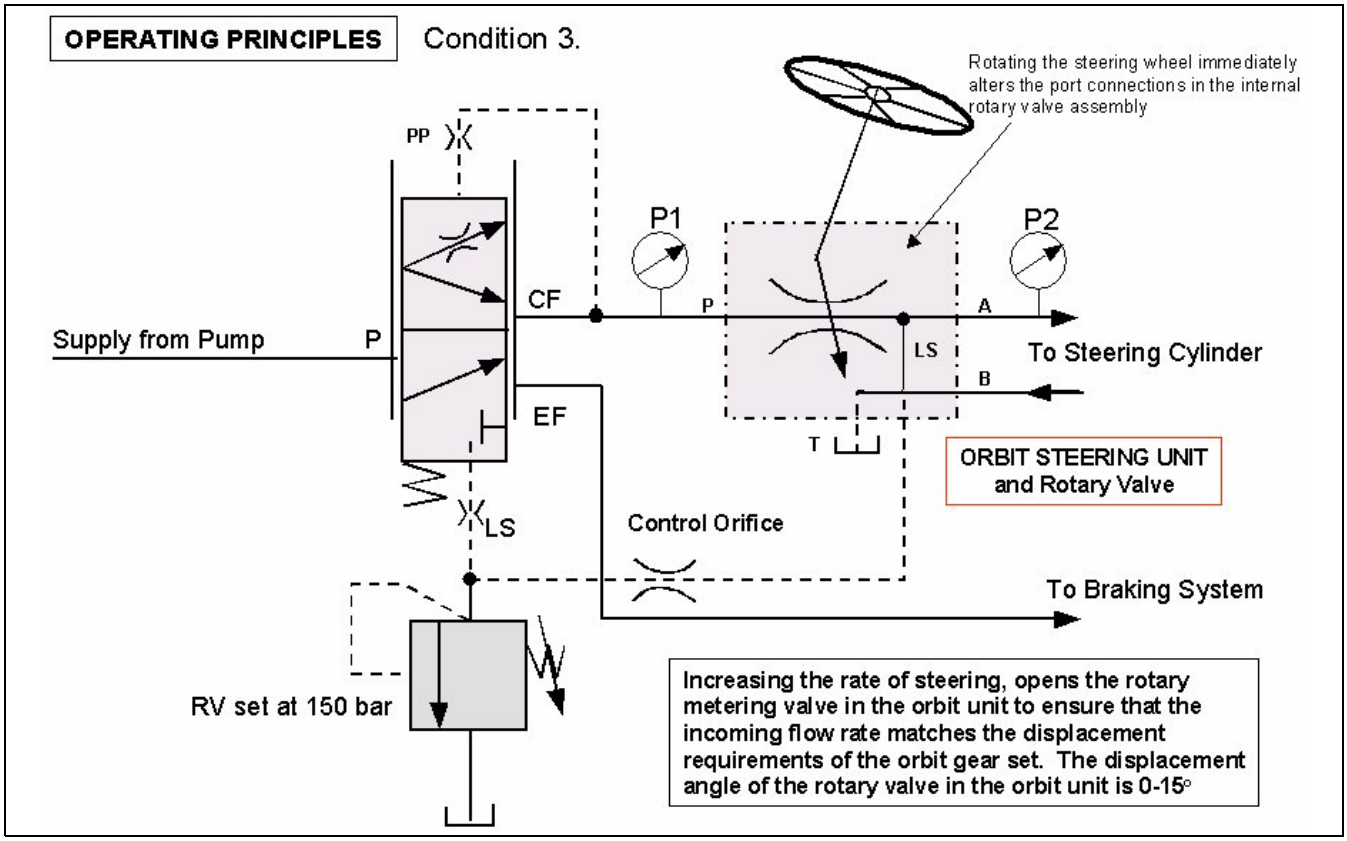


5.1. Travel Neutral Solenoid Schematic.



5.2. Travel Neutral Solenoid: Located on the 7-stage solenoid manifold in the service compartment beneath the main control valve. This device interlocks with the forward / reverse solenoid to give supply pressure to the foot pedal control valve.
Solenoid active - PPC pressure to foot valve
Solenoid inactive - No pressure to foot valve
If the travel neutral signal is selected the controller doesn't drive this solenoid so no PPC travel.

3. Condition 3.



SERVICE BRAKE AND SUSPENSION SYSTEM

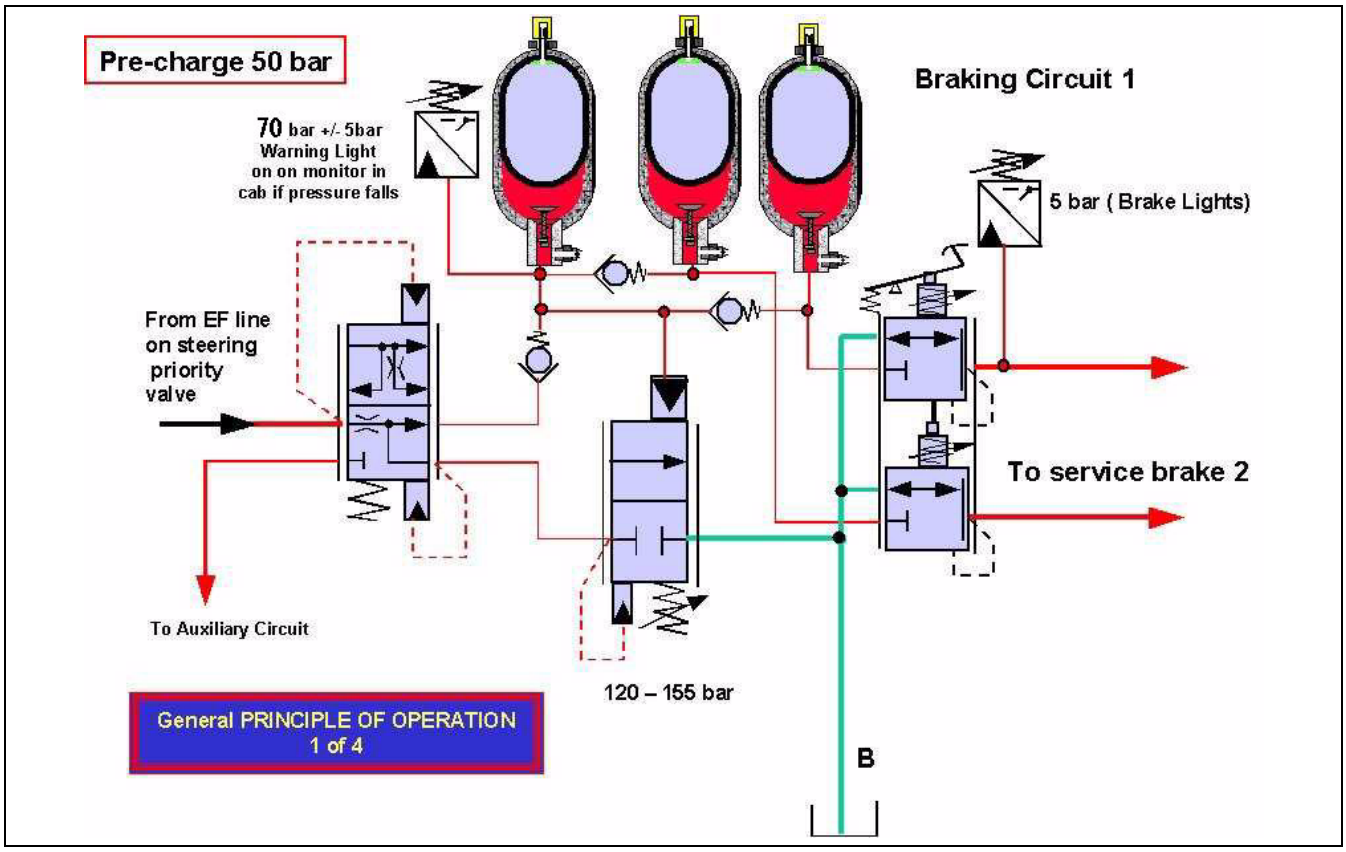
BRAKING SYSTEM

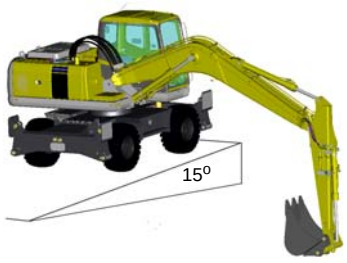
The hydraulic braking sytem unit contains the following services.

- Inlet Bypass Valve:
  distributing flow to other services when braking demand is low or not required.
- Accumulators:
  for fluid storage providing a number of brake operations (usually 5 ~ 8 operations depending upon accumulator capacity)
- Check Valves:
  to isolate the inlet supply from the charged accumulators and isolate individually charged accumulators from each other, thereby allowing individual brake circuits to be controlled.

NOTE: Service brakes1 and 2 are individually supplied but simultaneously applied.

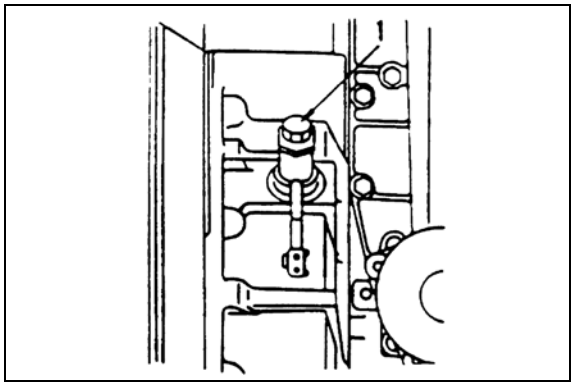
- Pressure Limiting Valve:
  to control the maximum pressure in the accumulators. This valve provides relief valve protection and diverts the fluid via its unloaded valve action.



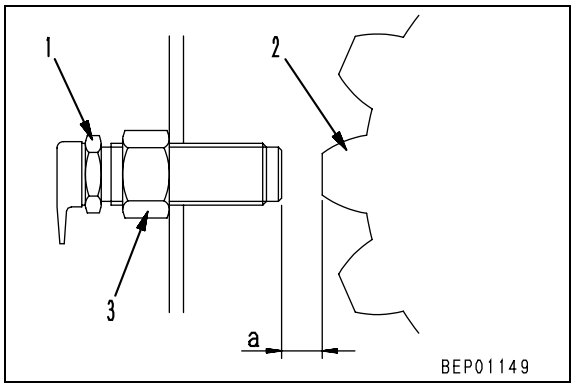
Applicable model					PW130-7K (Std)	
Category	Item	Measurement Condition		Unit	Standard value	Permissible value
Swing	Overrun when stopping swing	 Engine running at high idling Hydraulic oil temperature: 45 - 55°C Working mode: A mode Stop after swinging one turn and measure distance that swing circle moves. Distance of movement on outside circumference of swing circle.		deg {mm}	75±10 {730±100}	Max. 90 {Max. 870}
	Time taken to start swing	 Engine running at high idling Hydraulic oil temperature: 45 - 55°C In H/O mode Time taken to swing 90° and 180° from starting position.	90°	sec	2.9±0.3	Max. 3.5
			180°		4.0	8.5
	Time taken to swing	 Engine running at high idling Hydraulic oil temperature: 45 - 55°C In H/O mode Swing one turn and measure time taken to swing next 5 turns.			26.0 ±2.5	Max. 30
	Hydraulic drift of swing	 Engine stopped Hydraulic oil temperature: 45 - 55°C Set the machine on 15° slope, and sset upper structure at 90° to the side. Make match marks on swing circle outer race and track frame. Measure distance that match marks move apart after 15 minutes.		mm	0	0

ADJUSTMENT OF ENGINE SPEED SENSOR

- Detach engine speed sensor (1) before the adjustment, then check that there is no metal dust stuck or damage at the tip and fit it again.

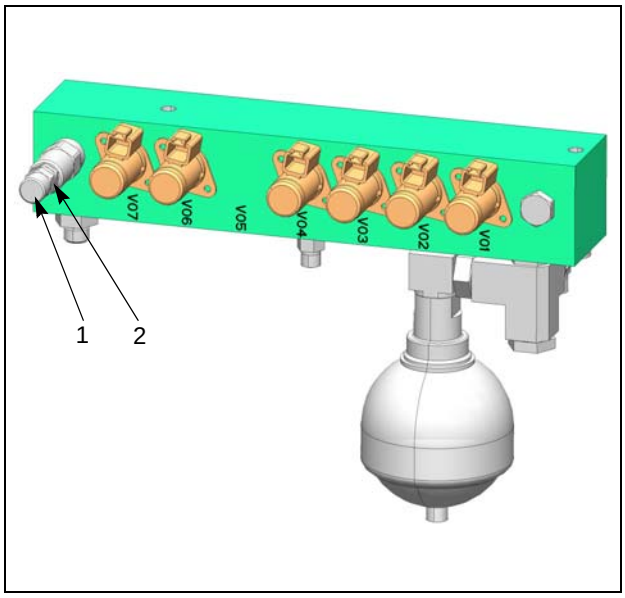


1. Screw in until the tip of sensor (1) contact gear (2).
2. When gear (2) contact sensor (1), turn back one turn.
3. Tighten (3).
   - ○ Be particulary careful when securing the sensor wiring to ensure that no excessive force is brought to bear on the wiring.
   - ○ Be careful not to let the tip of the sensor be scratched or to let any iron particles stick to the sensor tip.

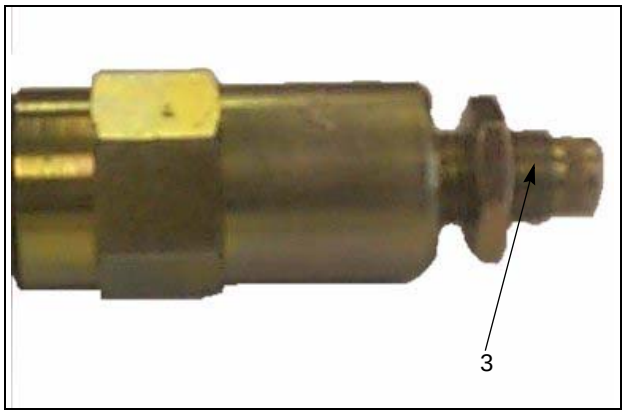


PROCEDURE FOR PRESSURE REDUCING ADJUSTMENT

1. Remove dust cap (1).
2. Loosen off adjusting screw nut (2).



3. Tighten adjusting screw (3) to increase pressure and loosen to decrease pressure.

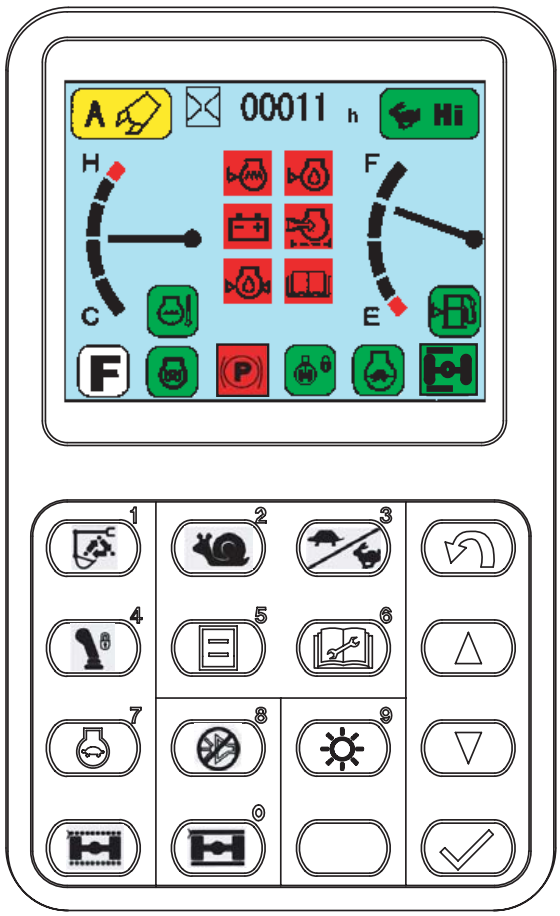


4. When at correct pressure tighten adjusting screw nut (2) and replace dust cap (1).

Checking PPC valve

If the hydraulic drift differs when the safety lock lever is in the LOCK or FREE position (engine running), the PPC valve is defective.

SPECIAL FUNCTION OF MONITOR PANEL



[1] Figure input switch 1
[2] Figure input switch 2
[3] Figure input switch 3
[4] Figure input switch 4
[5] Figure input switch 5
[6] Figure input switch 6
[7] Figure input switch 7
[8] Figure input switch 8
[9] Figure input switch 9
[0] Figure input switch 0

Undo switch
Scroll up switch
Scroll down switch
Input confirmation switch

In case there is no number assigned in the column of User Code No., or in case "none" is described in the column of Code No. of Service Code, the corresponding service code or failure code is not shown in the display of ordinary items, even if some abnormality occurs. It is recorded only in the failure history (either in electrical system or mechanical system) of Service Menu.

- History Classification indicates that a specific failure is classified as belonging to either electrical system or mechanical system, when it is recorded in Service Menu.
- "E" at the head of Code No. of Service Code means the following status of a specific failure.

- With "E":The failure is yet to be resolved and continues.
- Without "E":The failure has already been resolved.

4.4. Set contents of individual items

①:Default: The maintenance time set in the monitor (recommended by the manufacturer and cannot be changed).

②:Set: Maintenance time that can be freely set. The maintenance mode program functions based on this maintenance time. (The maintenance time can be increased or decreased by 50 hours with [▲] or [▼] switch)

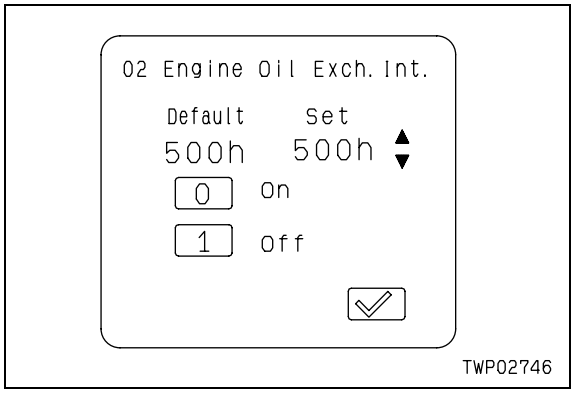
③:On: Maintenance display function with this instruction becomes effectual.

④:Off: Maintenance display with this instruction becomes ineffectual.

- The lowest maintenance time is 50 h.

4.5. Set contents of "Use Default Values"

When selecting this menu and depressing the switch [✓], all individual time settings are returned to the factory settings.



TROUBLESHOOTING

2. Points to remember when trouble-shooting electric circuits

2.1. Always turn the power OFF before disconnecting or connect connectors.

2.2. Before carrying out troubleshooting, check that all the related connectors are properly inserted.

- Disconnect and connect the related connectors several times to check.

2.3. Always connect any disconnected connectors before going on to the next step.

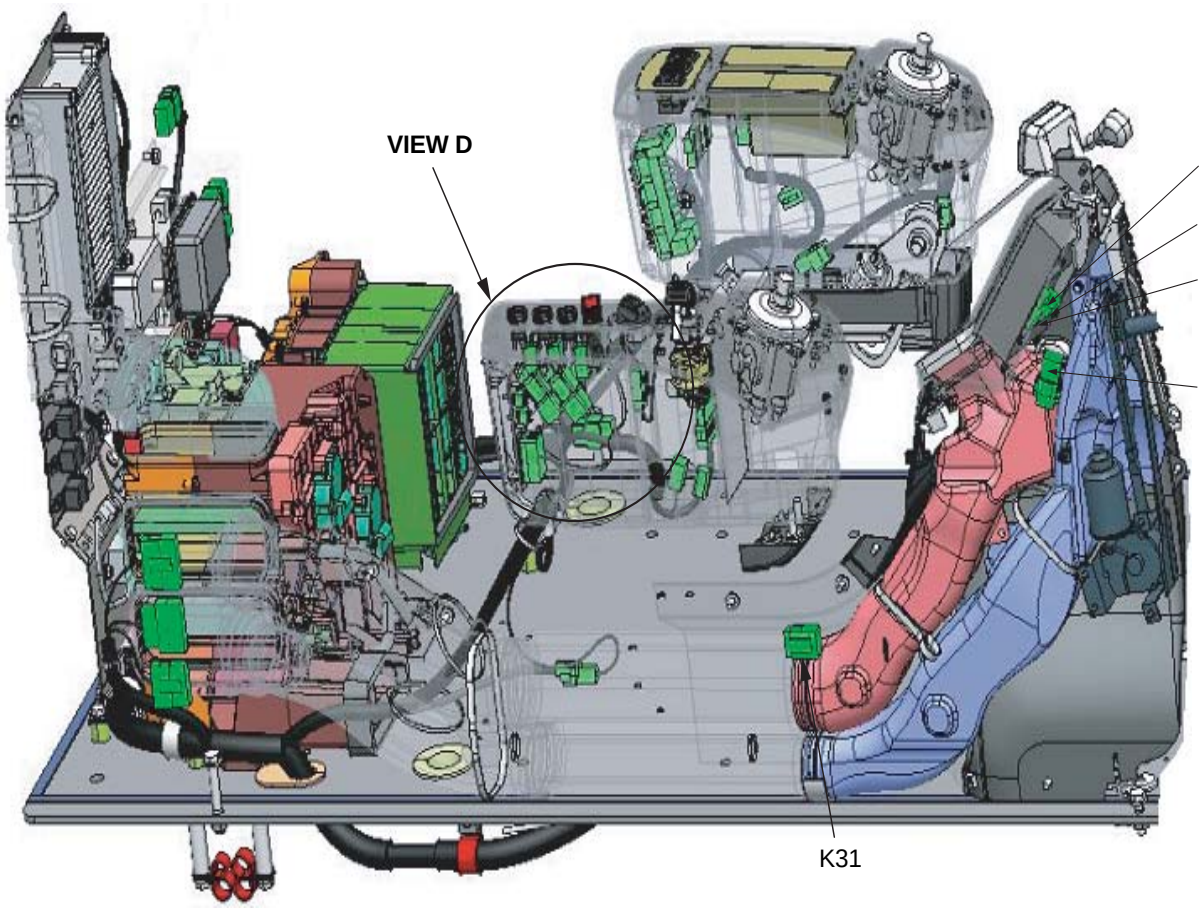
- If the power is turned ON with the connectors still disconnected, unnecessary abnormality displays will be generated.

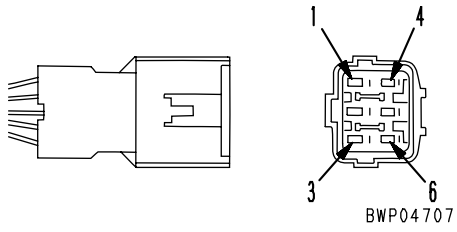
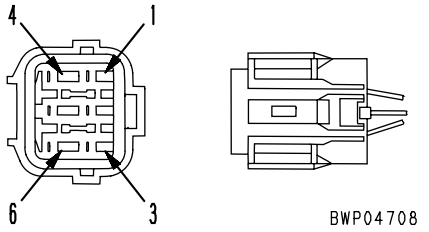
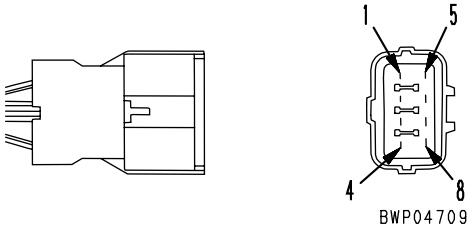
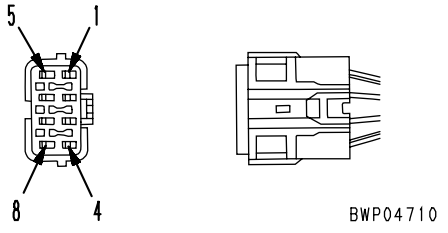
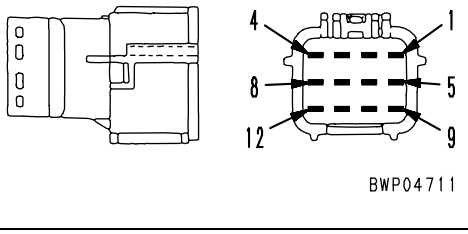
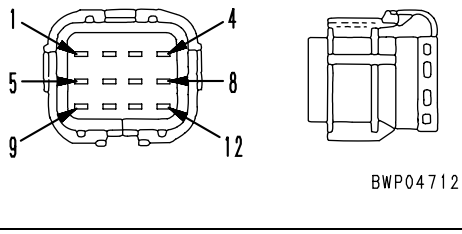
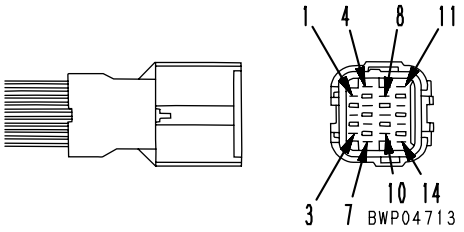
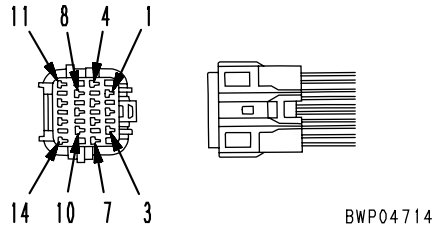
2.4. When carrying out troubleshooting of circuits (measuring the voltage, resistance, continuity, or current), move the related wiring and connectors several times and check that there is no change in the reading of the tester.

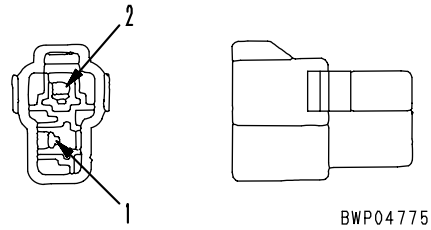
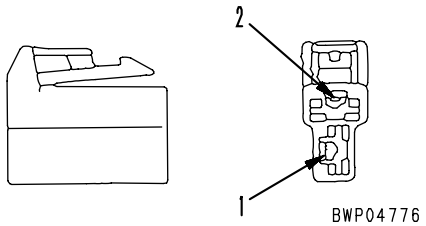
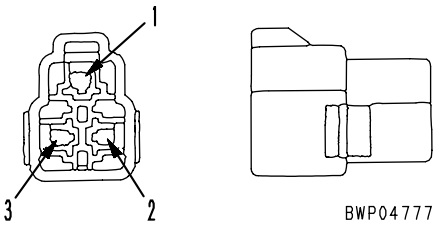
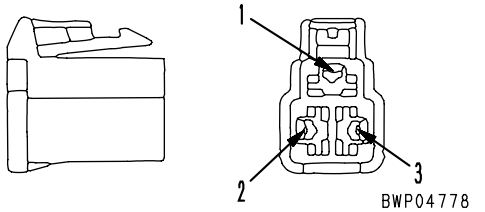
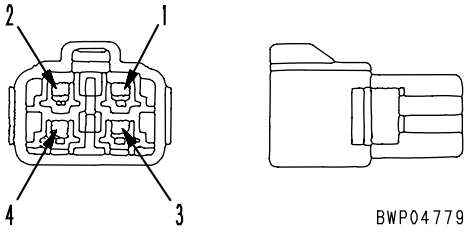
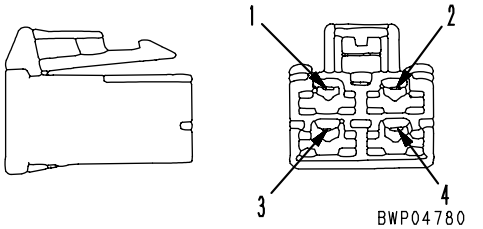
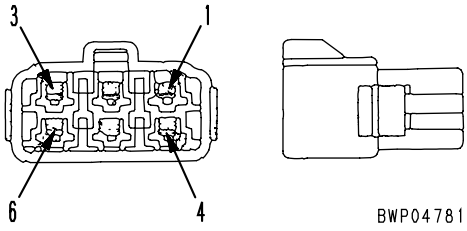
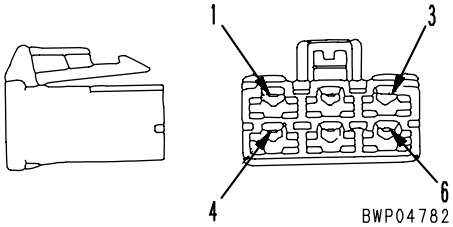
- If there is any change, there is probably defective contact in that circuit.

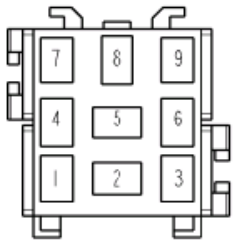
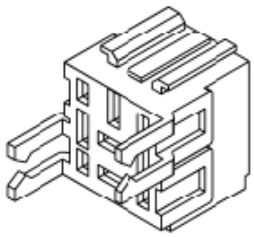
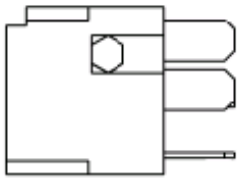
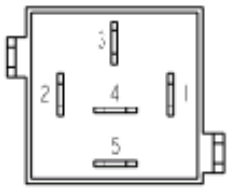
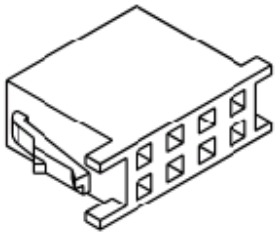
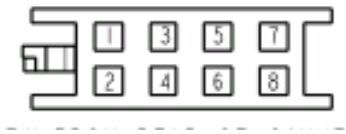
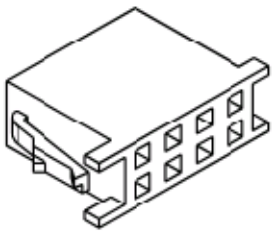
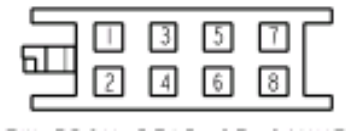
Conn No.	Type	No.of Pin	Name of Device	Address
G112	Spade	1	Hazard switch	AO6
G12	S	2	Indicator RH	A2
G13	S	2	Indicator LH	F1
G14	Terminal		Side light RH	B2
G15	Terminal		Side light LH	F1
G164	X	3	Overload caution sensor	C3
G3	AMP	7	Column switch assy	AL4
G33	DT	4	Seat - air suspension / heated (optional)	O5
G4	AMP	7	Column switch assy	AL4
G51	Spade	1	Engine room lamp	C8
G52	KESO	4	Lower wiper motor (optional)	E1
G53	DT	2	Beacon (optional)	AT7
G7	DT	4	Tail light LH	F8
G70	DT	6	Left knob	U4
G71	DT	6	Right lever switch	JJ4
G72	DT	4	Right lever FNR switch	JJ4
G73	DT	4	Emergency FNR switch	JJ4
G76	Terminal		Side light	B2
G77	Terminal		Side light	F1
G8	DT	4	Tail light RH	B8
G9	X	2	Number plate lamp	C8
G93	-		Fuse holder	B8
G94	-		Fuse holder	F8
G99	Britax	10	Park brake switch	HH6
H08	M	8	Intermediate connector	WW5/AU5
H09	S	8	Intermediate connector	WW5/AU6
H10	S	16	Intermediate connector	SS5
H11	S	16	Intermediate connector	SS5
H12	S	12	Intermediate connector	SS6
H15	090	20	Intermediate connector	JJ5
J01	J	20	Junction connector (black)	UU5
J02	J	20	Junction connector (black)	UU4
J03	J	20	Junction connector (green)	UU4
J04	J	20	Junction connector (green)	UU4
J05	J	20	Junction connector (pink)	VV4

VIEW on B



No.of pins	SWP type connector		
	Male (female housing)	Female (male housing)	T-adapter Part No.
6			799-601-7050
	Part No.: 08055-10681	Part No.: 08055-10691	
8			799-601-7060
	Part No.: 08055-10881	Part No.: 08055-10891	
12			799-601-7310
	Part No.: 08055-11281	Part No.: 08055-11291	
14			799-601-7070
	Part No.: 08055-11481	Part No.: 08055-11491	

No.of pins	KES 1 (Automobile) connector		
	Male (female housing)	Female (male housing)	T-adapter Part No.
2			—
	Part No.:08027-10210 (Natural color) 08027-10220 (Black)	Part No.:08027-10260 (Natural color) 08027-10270 (Black)	
3			—
	Part No.:08027-10310	Part No.:08027-10360	
4			—
	Part No.:08027-10410 (Natural color) 08027-10420 (Black)	Part No.:08027-10460 (Natural color) 08027-10470 (Black)	
6			—
	Part No.:08027-10610 (Natural color) 08027-10620 (Black)	Part No.:08027-10660 (Natural color) 08027-10670 (Black)	

No.of pins	Miscellaneous connectors	
	Body (plug)	Body (receptacle)
9		
	Part No.:20K-06-31960	Part No.:
5		
	Part No.:20K-06-32130	Part No.:
8		
	Part No.:20K-06-32170	Part No.:
8		
	Part No.:20K-06-K32160	Part No.:

HYDRAULIC CIRCUIT DIAGRAM (1/3)