Komatsu PC128uu-1 Sample File.

This single sample file contains samples for

10535 Komatsu PC128uu-1 Ops & Maintenance 264 pages

10535 Komatsu PC128uu-1, PC128us-1 WSM 794 pages

10535 Komatsu Engine 102, 4d102e-1, S6d102e-1 WSM 949 pages

Ops = operators manual
WSM = workshop manual
[***p] = *** pages

info@farmequipmentmanuals.co.nz

CEAM004200

Operation & Maintenance Manual

PC128UU-1

HYDRAULIC EXCAVATOR

SERIAL NUMBERS **PC128UU-1 -1001** and up

September 1999

6. TABLE OF CONTENTS

Checks and Maintenance

Specifications

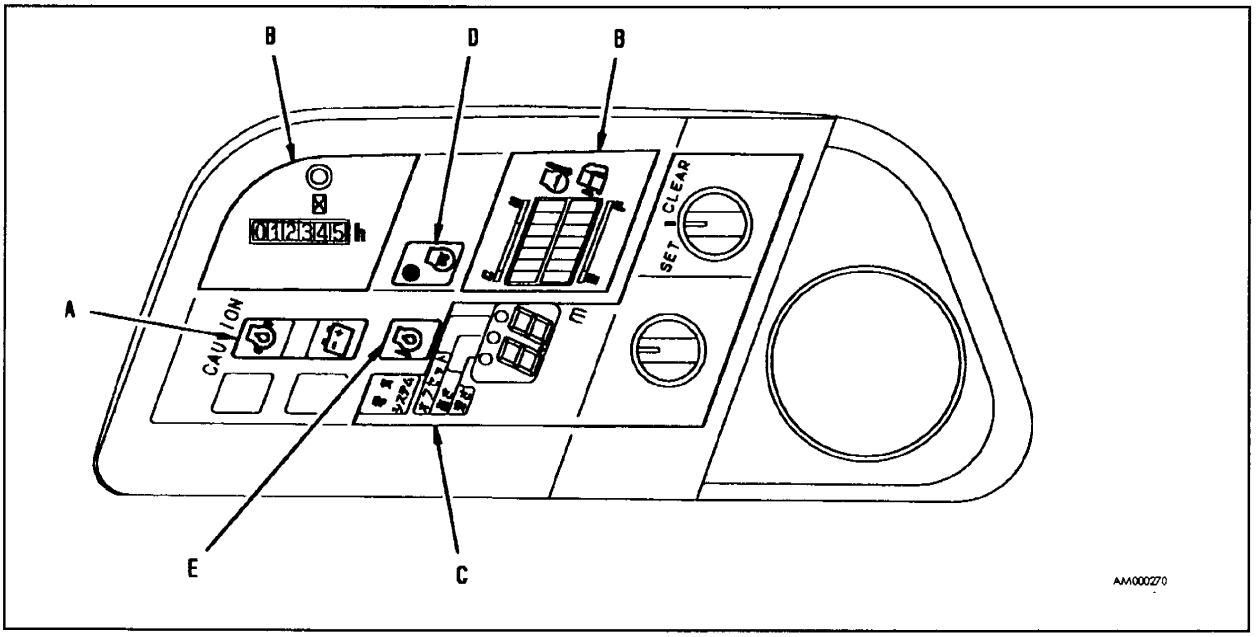
Optional Parts, Attachments

12. EXPLANATION OF EACH DEVICE

Each device necessary for operation is explained.

The most important thing for proper, safe and smooth operation is to properly understand the ways to operate these devices and to understand what the gauges mean.

12.1 VEHICLE MONITOR PANEL



The monitor panel shows the basic items that must be checked before starting the engine.

Lights will come on for anything that is abnormal on the monitor panel.

The light will go out when the engine is started even if there is something abnormal.

A. Emergency stop items (12.1.1)

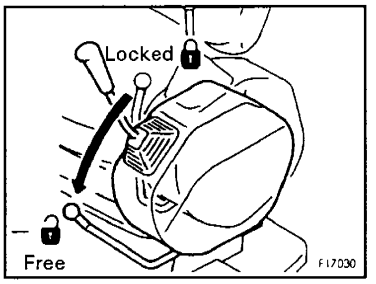
When the engine is running and there is something abnormal the item that needs to be taken care of will be indicated.

The monitor light will flash and a buzzer will sound when something is abnormal.

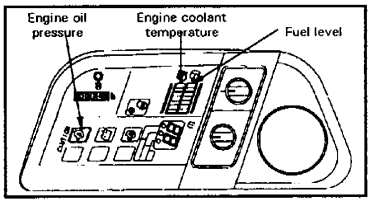
⚠ Caution!

Immediately cease operations and check and repair the problem when these monitors flash.

5. Place locking lever (3) in the locked position.



13.15 CHECKS AFTER COMPLETING OPERATION



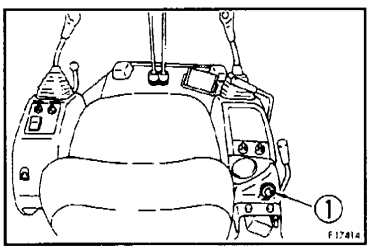
Check the engine coolant temperature, engine oil pressure and the amount of fuel remaining on the monitors.

13.16 STOPPING THE ENGINE

NOTICE

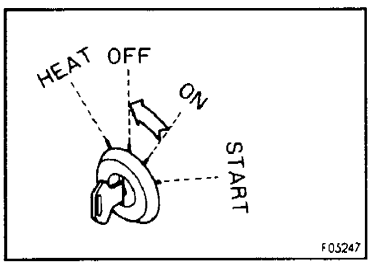
Do not stop the engine abruptly except when there is an emergency. Stopping the engine abruptly before it has cooled will shorten the life of various engine components. If the engine has overheated do not stop the engine suddenly. Allow it to run at moderate speed and stop it after it has gradually cooled down.

1. Run the engine for 5 minutes at a low idle and allow it to cool down gradually.

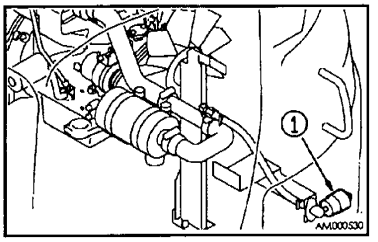


2. Turn the key in the ignition switch (1) to the OFF position.

3. Remove the key from the ignition switch (1).



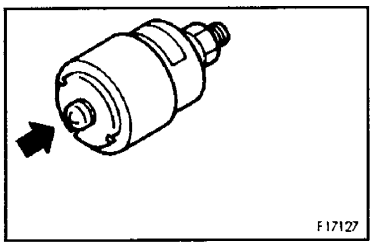
25.3.5 Check the dust indicator



1. Open the left side cover and check to see whether a red piston is protruding at the arrow sign of the dust indicator (1) .

2. If red piston is protruding immediately clean the element or replace it.

   For how to clean the element, see item 25.2.1 "Inspecting, cleaning and replacing the air cleaner."



3. After checking, cleaning or replacing the air cleaner, push the knob of dust indicator (1) and return the red piston to its original position.

25.3.6 Check the electrical circuits

⚠ Warning!

If fuses blow frequently and there is evidence of short circuits in the wiring, do not fail to ascertain the cause and correct it.

Check for blown fuses, breaks in the wiring and evidence of short circuits. Check also for loose terminals, and if found, tighten them.

In particular, check the
- Battery
- Starter
- Alternator

etc.

Consult with Komatsu or your Komatsu distributor for locating and correcting the problem.

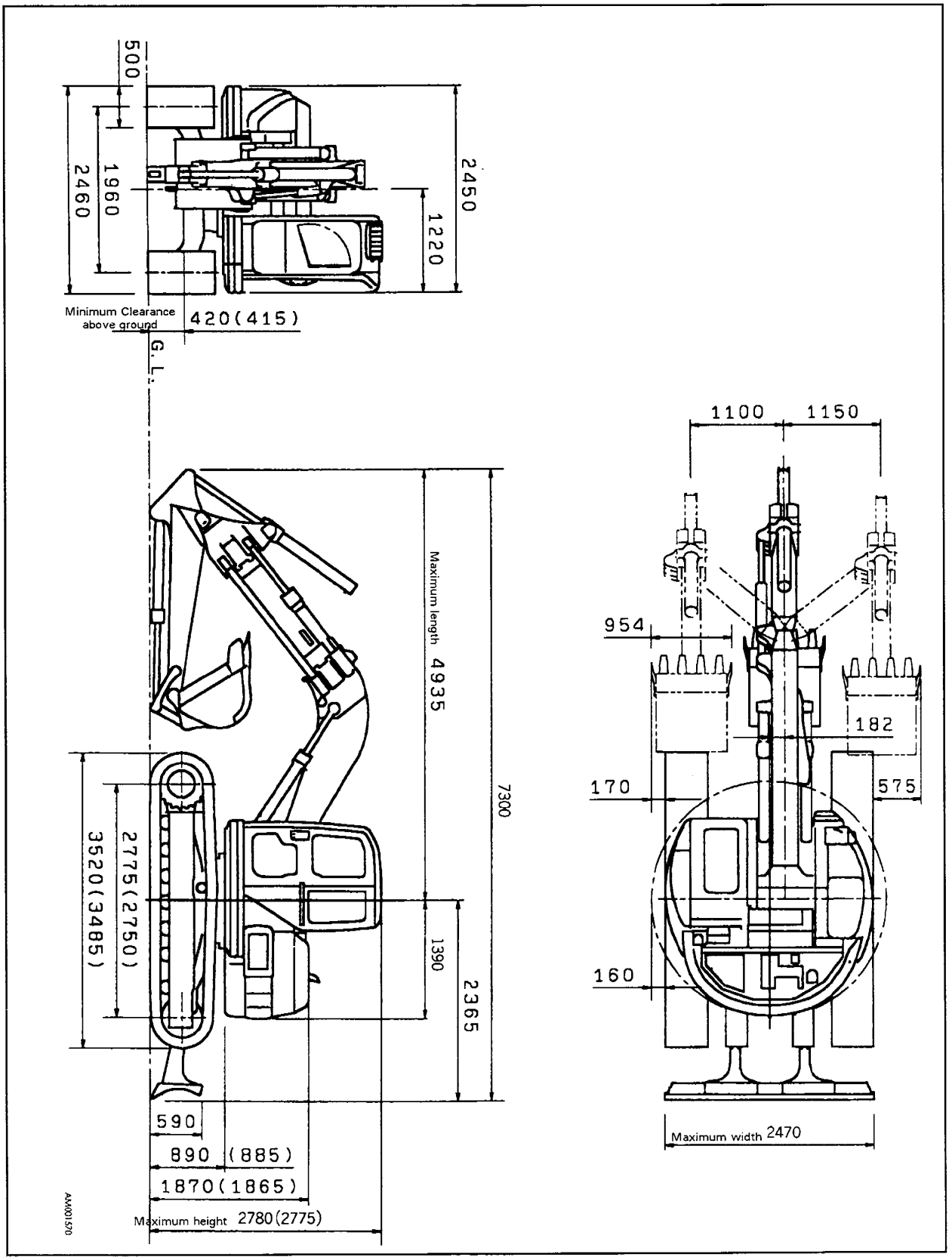
⚠ Warning!

Always remove any flammable materials like dead leaves, twigs and grass that may have accumulated around the battery as they can cause fires.

Always check around the battery for flammable materials that may have accumulated when doing visual checks and checks prior to beginning operations and remove them if there are any.

- Vehicles with rubber tracks
- Vehicles with steel tracks

Figures not in parentheses are those for vehicles with rubber tracks
Figures in parentheses are those for vehicles with steel tracks
Figures standing alone with corresponding figures in parentheses are the same for vehicles with rubber tracks and vehicles with steel tracks



4-3

SHOP MANUAL

KOMATSU

PC128UU-1
PC128US-1

MACHINE MODEL	SERIAL NUMBER
PC128UU-1	**2347 and up**
PC128US-1	**1715 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.
- PC128UU-1, PC128US-1 mounts the S4D102E-1 engine.
  For details of the engine, see the 102 Series Engine Shop Manual.

Printed in Japan 08-00(02)

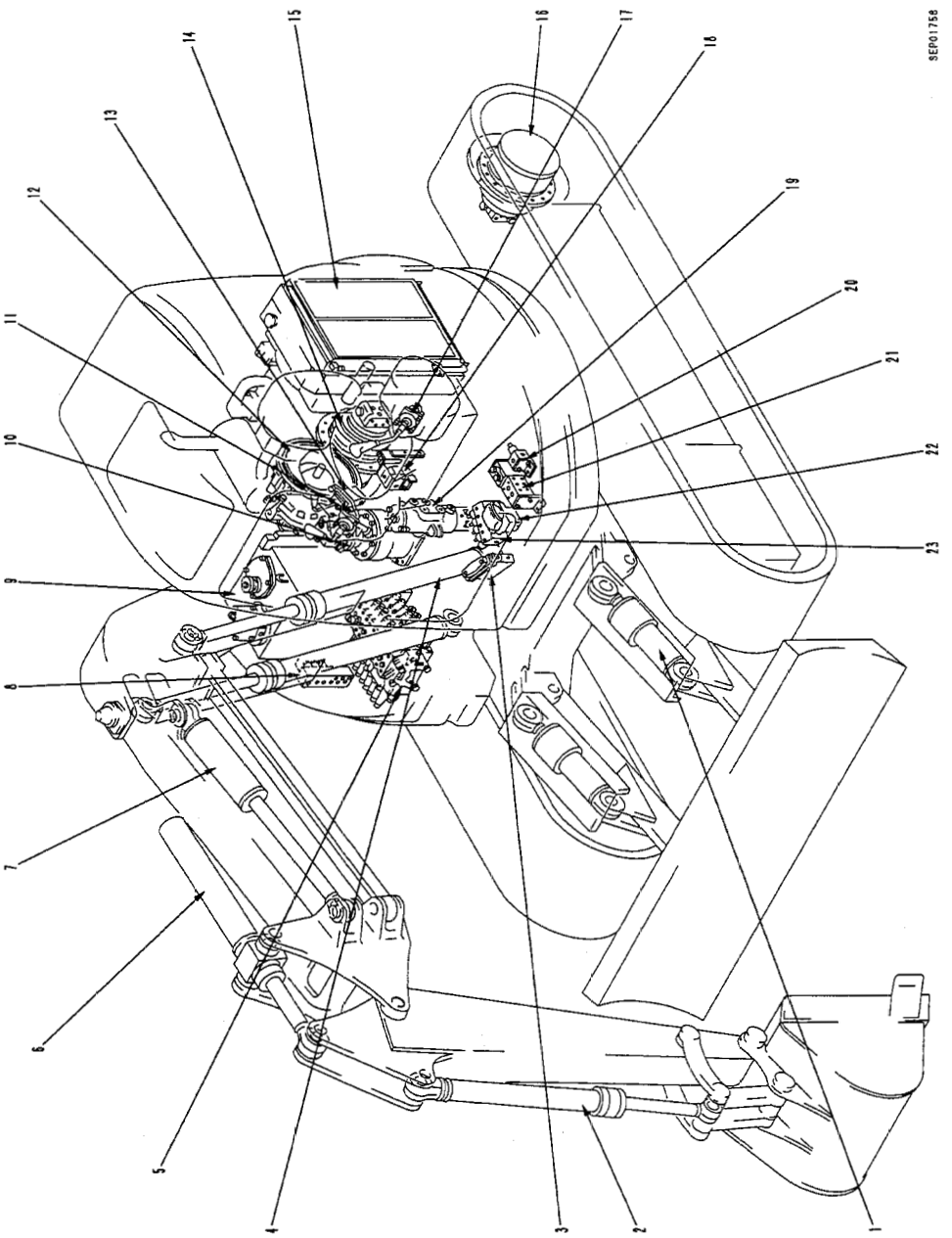
CONTENTS

HYDRAULIC PIPING DRAWING

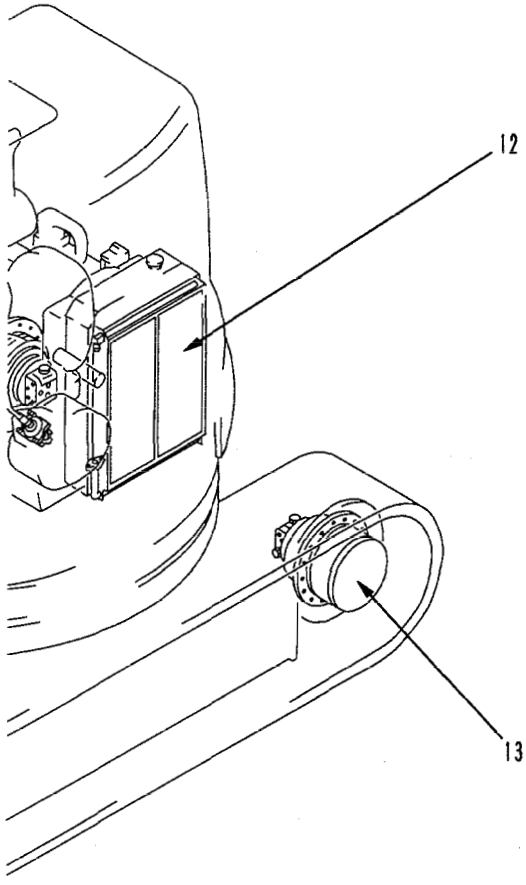
PC128UU-1

★ For details of this page, see page 90 – 3

1. Blade cylinder
2. Bucket cylinder
3. Offset PPC valve
4. Boom cylinder
5. Control valve
6. Arm cylinder
7. Offset cylinder
8. Solenoid valve (for valve, swing, travel control)
9. Hydraulic tank
10. Swing motor
11. R.H. work equipment PPC valve
12. Hydraulic pump
13. Blade PPC valve
14. R.H. travel motor
15. Oil cooler
16. L.H. travel motor
17. L.H. work equipment PPC valve
18. Boom holding valve
19. Center swivel joint
20. PPC lock solenoid valve
21. PPC shuttle, travel junction valve
22. Travel PPC valve
23. EPC solenoid valve (for FORE system control)



021Y01



021Y01

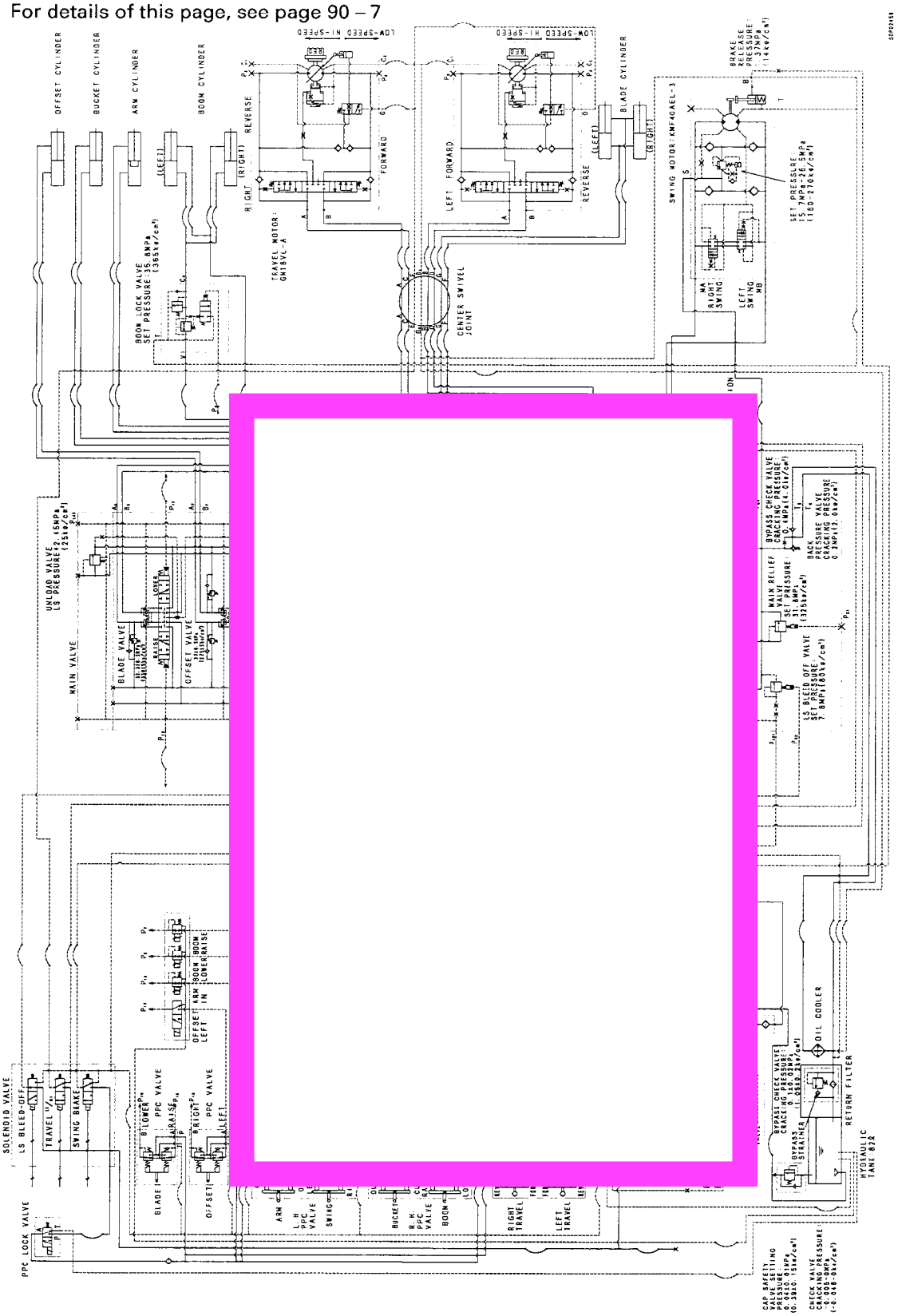
1. Bucket cylinder
2. Arm cylinder
3. Control valve
4. Boom cylinder
5. Solenoid valve
   (for valve, swing, travel control)
6. Hydraulic tank
7. R.H. work equipment PPC valve
8. Blade PPC valve
9. Hydraulic pump
10. R.H. travel motor
11. L.H. work equipment PPC valve
12. Oil cooler
13. L.H. travel motor
14. PPC shuttle, travel junction valve
15. Boom holding valve
16. EPC solenoid valve
    (Electronic boom cushion, PPC lock)
17. Travel PPC valve
18. Center swivel joint
19. Blade cylinder
20. Swing motor

SVP06229

HYDRAULIC CIRCUIT DIAGRAM

PC128UU-1

★ For details of this page, see page 90 – 7



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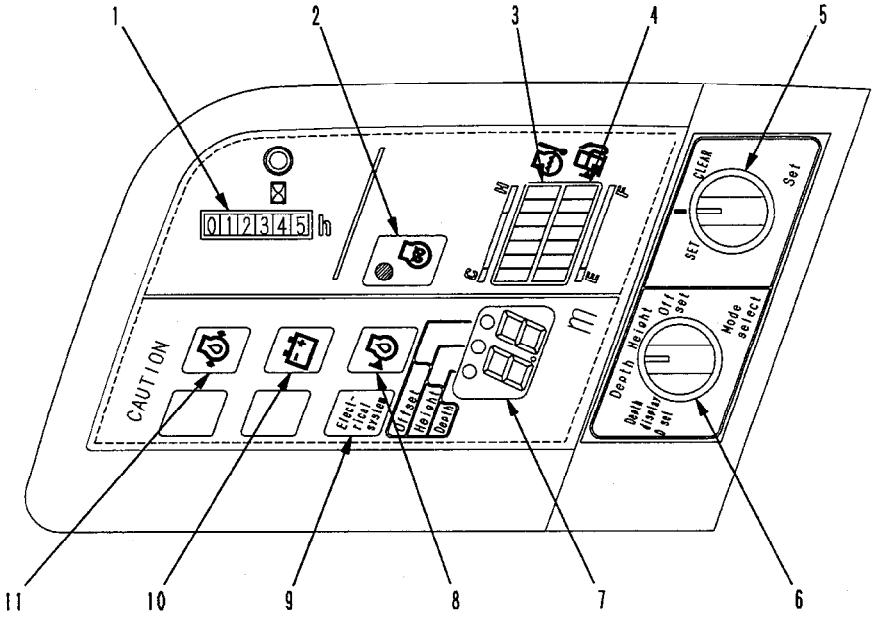


SDP02524

1. Service meter
2. Preheating pilot lamp
3. Coolant temperature gauge
4. Fuel gauge
5. Setting switch (Note 1)
6. Mode select switch (Note 1)
7. Depth display (Note 1)
8. Engine oil level caution lamp (Note 2)
9. Electric system caution lamp (Note 1)
10. Battery charge level caution lamp
11. Engine oil pressure caution lamp

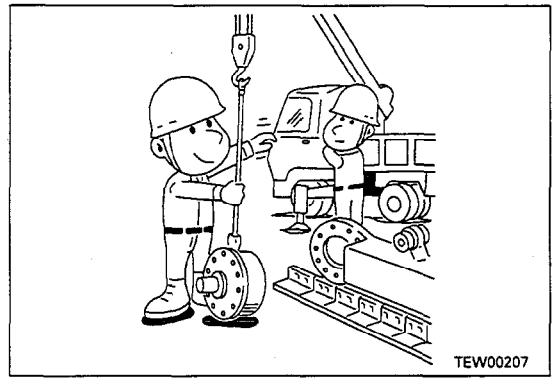
Note 1: For the display and operating procedures, refer to the fore system of "Electronic control system".
Note 2: The engine oil level caution lamp is optional; however, only the lamp is mounted as standard.

3. POINTS TO REMEMBER WHEN HANDLING HYDRAULIC EQUIPMENT

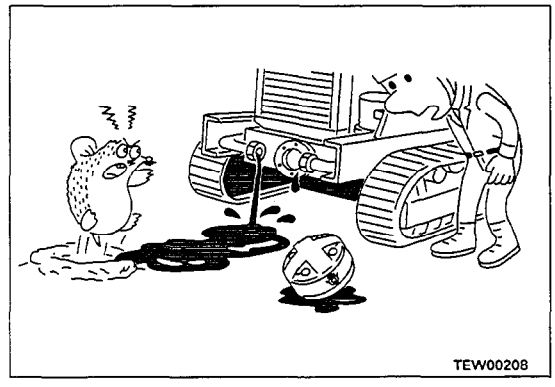
With the increase in pressure and precision of hydraulic equipment, the most common cause of failure is dirt (foreign material) in the hydraulic circuit. When adding hydraulic oil, or when disassembling or assembling hydraulic equipment, it is necessary to be particularly careful.

1) **Be careful of the operating environment.**
Avoid adding hydraulic oil, replacing filters, or repairing the machine in rain or high winds, or places where there is a lot of dust.

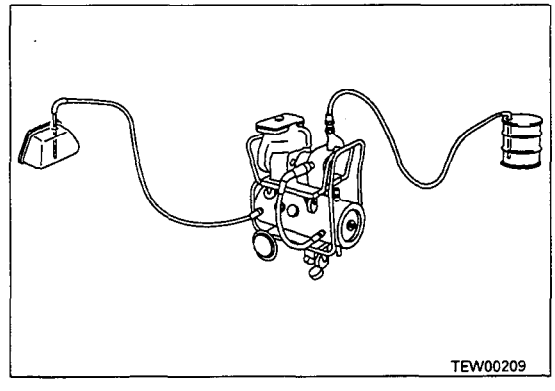
2) **Disassembly and maintenance work in the field**
If disassembly or maintenance work is carried out on hydraulic equipment in the field, there is danger of dust entering the equipment. It is also difficult to confirm the performance after repairs, so it is desirable to use unit exchange. Disassembly and main-tenance of hydraulic equipment should be carried out in a specially prepared dustproof workshop, and the performance should be confirmed with special test equipment.


TEW00207

3) **Sealing openings**
After any piping or equipment is removed, the openings should be sealed with caps, tapes, or vinyl bags to prevent any dirt or dust from entering. If the opening is left open or is blocked with a rag, there is danger of dirt entering or of the surrounding area being made dirty by leaking oil so never do this.
Do not simply drain oil out on to the ground, collect it and ask the customer to dispose of it, or take it back with you for disposal.


TEW00208

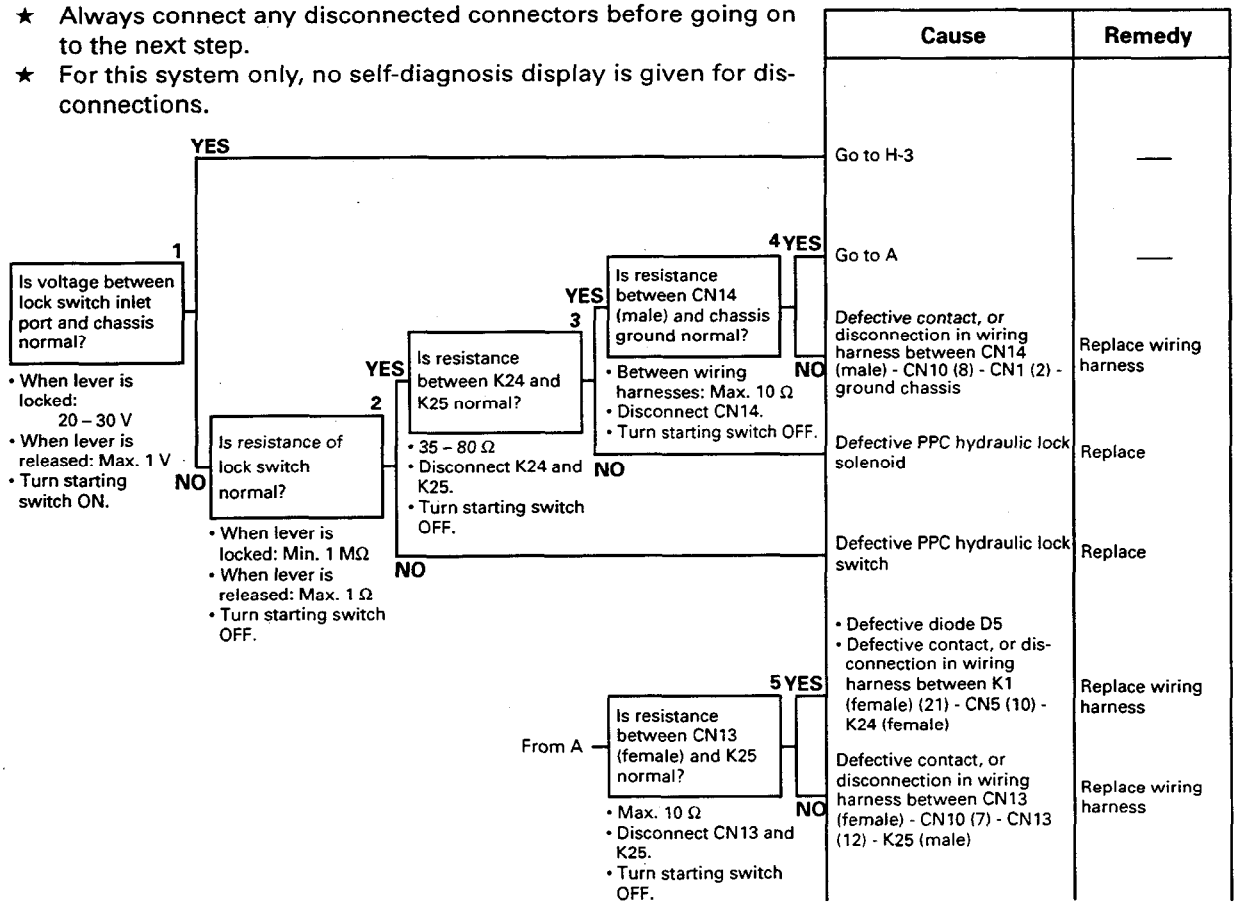
4) **Do not let any dirt or dust get in during refilling operations.**
Be careful not to let any dirt or dust get in when refilling with hydraulic oil. Always keep the oil filler and the area around it clean, and also use clean pumps and oil containers. If an oil cleaning device is used, it is possible to filter out the dirt that has collected during storage, so this is an even more effective method.


TEW00209

021Y01

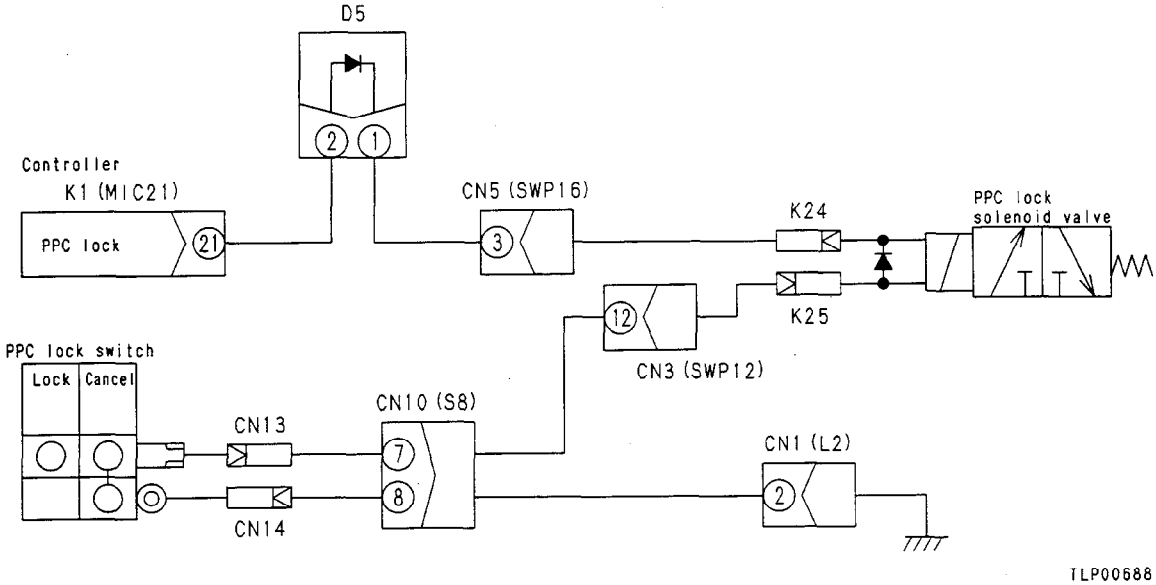
E-19 Work equipment does not work even when work equipment lock lever is released

★ When error code [91] (valve open) is not displayed.
★ Before carrying out troubleshooting, check that all the related connectors are properly inserted.
★ Always connect any disconnected connectors before going on to the next step.
★ For this system only, no self-diagnosis display is given for disconnections.



021Y01

E-19 Related electric circuit diagram



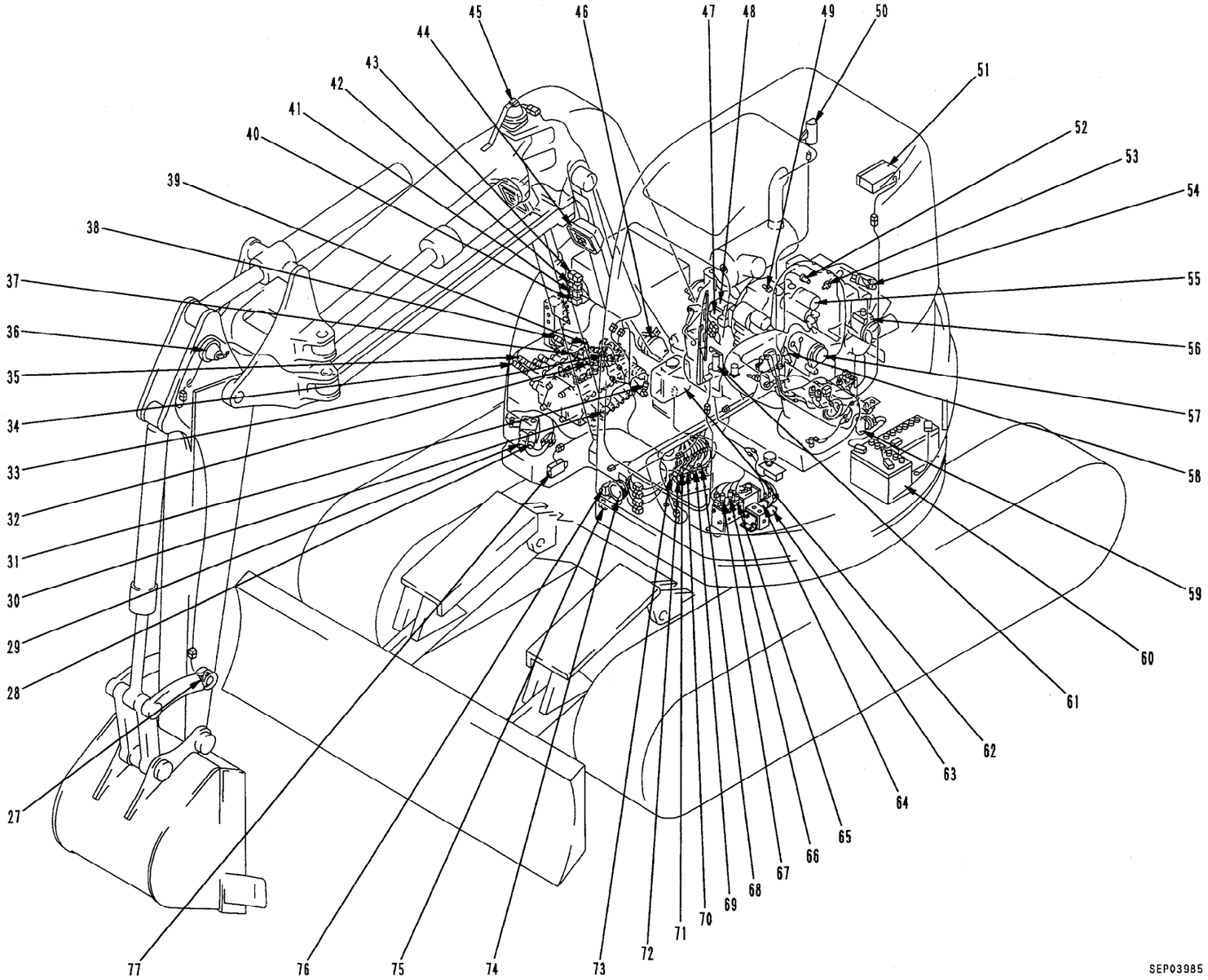
TLP00688

20-238
②

ACTUAL ELECTRICAL WIRING DIAGRAM

MACHINE EQUIPPED WITH AUTOMATIC HORIZONTAL EXCAVATION CONTROL

PC128UU-1

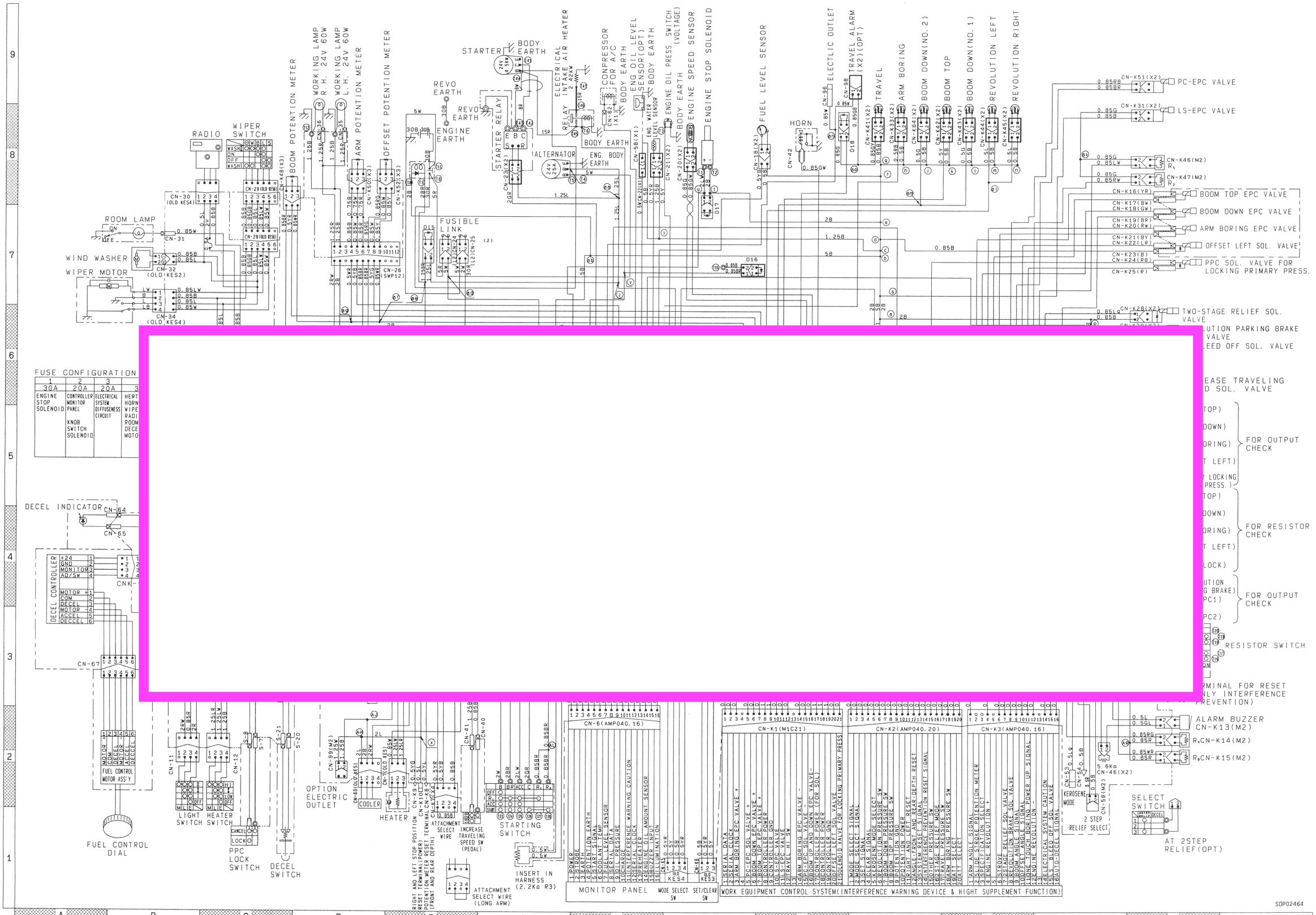


021Y01

27. Bucket potentiometer
28. Bucket dump EPC valve
29. Bucket curl EPC valve
30. Blade raise oil pressure switch
31. Swing right oil pressure switch
32. Arm cylinder read pressure sensor
33. Boom cylinder bottom pressure sensor
34. Blade lower oil pressure sensor
35. Offset right oil pressure switch
36. Arm potentio meter
37. Arm cylinder bottom pressure sensor
38. Swing left oil pressure switch
39. Boom cylinder head pressure sensor
40. 2-stage relief solenoid valve
41. Swing parking brake solenoid valve
42. Travel speed solenoid valve
43. Bleed off solenoid valve
44. Working lamp
45. Offset potentiometer
46. Boom potentiometer
47. PC-EPC valve
48. LS-EPC valve
49. Engine rotating sensor
50. Room lamp
51. Coolant temperrature sensor
52. Radio
53. Engine oil pressure sensor
54. Engine stop solenoid
55. Starting switch
56. Coolant compressor
57. Alternator
58. Heater relay
59. Battery relay
60. Battery
61. Wiper motor
62. Window washer
63. PPC lock solenoid
64. Solenoid valve for supply of automatic excavation pressure
65. Travel oil pressure switch
66. Boom raise oil pressure
67. Boom lower oil pressure
68. Arm dump EPC valve
69. Boom raise stop EPC valve
70. Arm curl stop EPC valve
71. Boom lower stop EPC valve
72. Offset left oil pressure switch
73. Offset left stop solenoid valve
74. Horn
75. LS-control EPC resistor 2
76. LS-control EPC resistor 1
77. PC resistor

ELECTRICAL CIRCUIT DIAGRAM

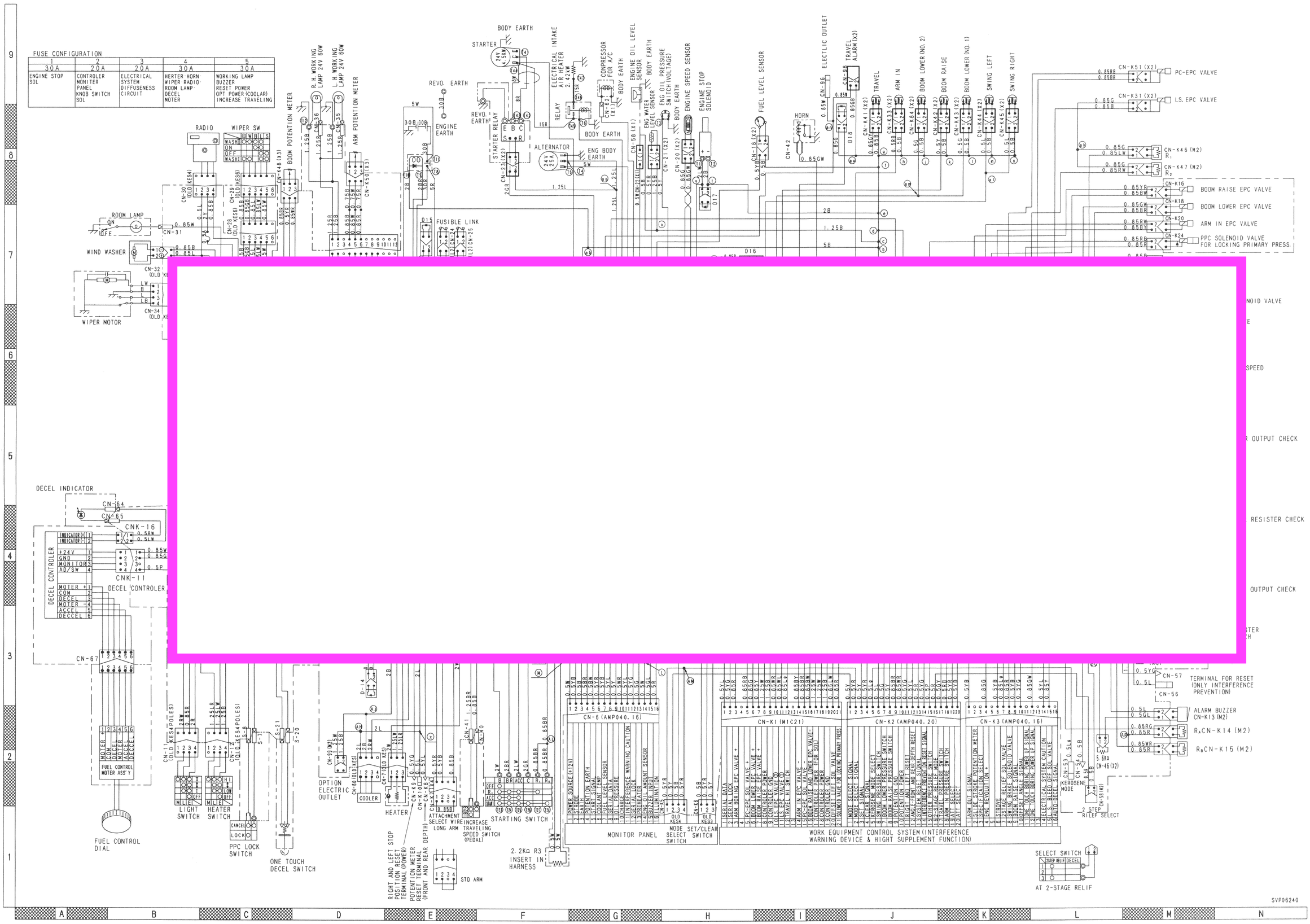
PC128UU-1



021Y01

ELECTRICAL CIRCUIT DIAGRAM

PC128US-1



SHOP MANUAL

KOMATSU

102 SERIES DIESEL ENGINE

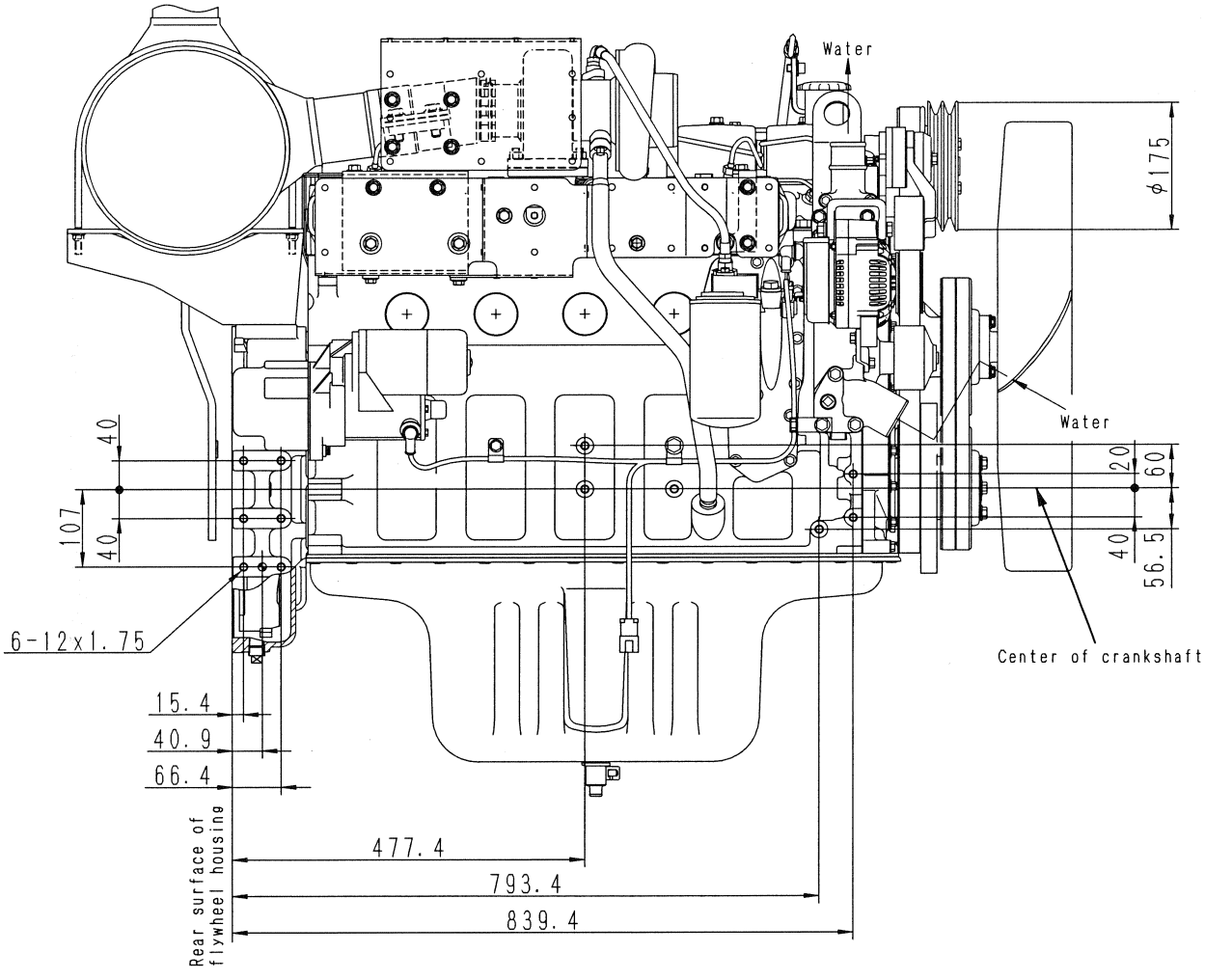
★ This Shop Manual is made by adding the special descriptions for the **102-2** series to the Shop Manual for the current **102-1** series.

Printed in Japan 02-03(02)

CONTENTS

S6D102E-1 (PC200-6)

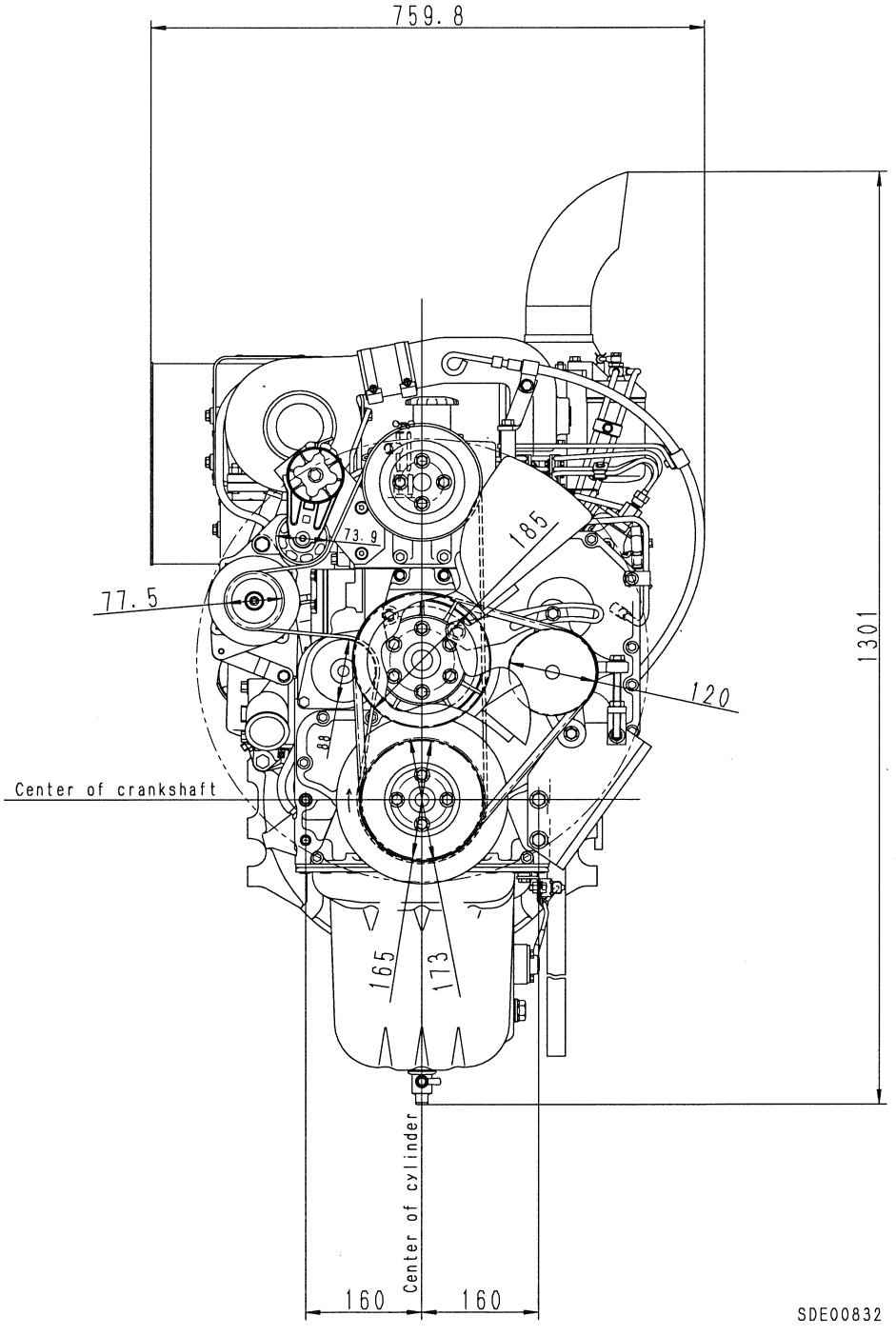
RIGHT-HAND VIEW



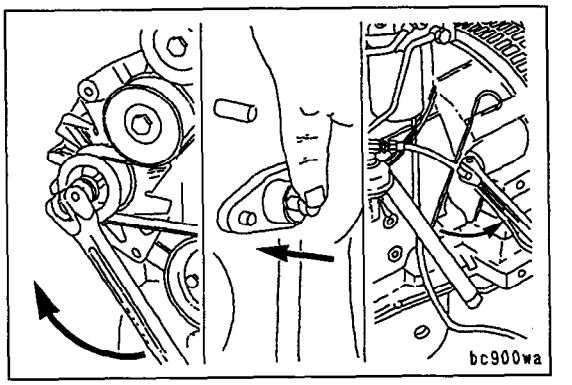
SDE00831

S6D102E-1 (PC200-6)

FRONT VIEW

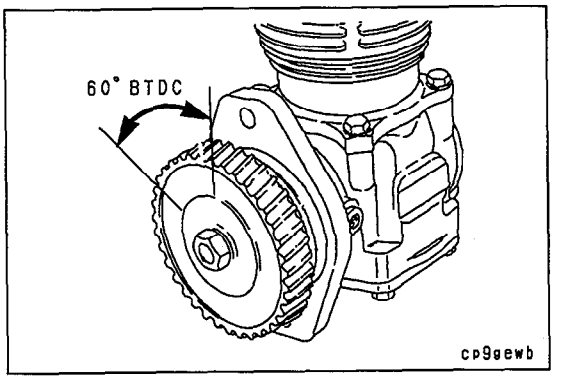


After determining the TDC position, check if the timing pin is out of position.
Push the timing pin and slowly bar the crankshaft to determine the TDC position of the No. 1 cylinder.



Rotate the compressor TDC mark 60° forward from the TDC position or 6 teeth forward (if the gear has 36 teeth). This position becomes approximately the 10 o'clock position as seen from the front of the air compressor.

Caution: On the Holset air compressor series SSQE120, 296, and 338, a radial line indicating the TDC position is etched on the gear.



673501

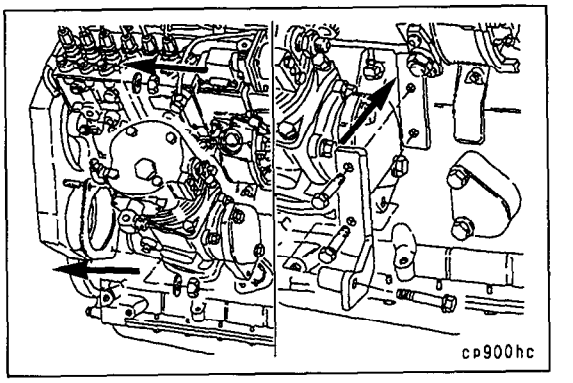
INSTALLATION

18 mm, 14 mm, 10 mm

Fit a new gasket and install the air compressor to the gear housing.
Install the air compressor support bracket.

kgm:
Mounting nut : **77 Nm {7.9 kgm}**
Support mounting bolts : **24 Nm {2.4 kgm}**

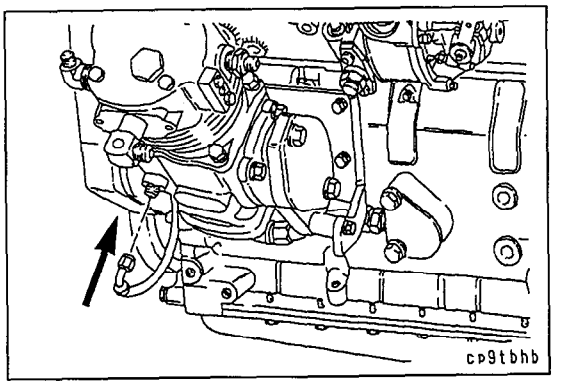
Caution: The gear timing is unnecessary.



9/16 inch

Install the oil supply line.

kgm: **15 Nm {1.5 kgm}**

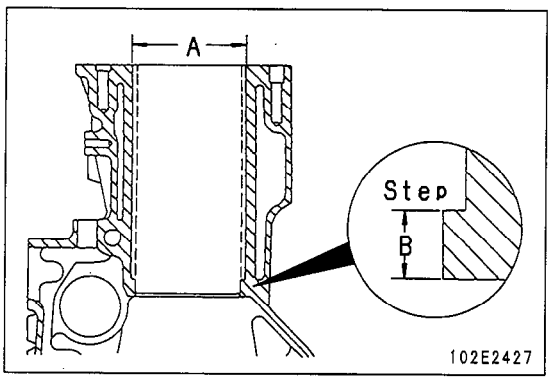


15 REPAIR AND REPLACEMENT OF PARTS

INSTALLATION OF REPAIR SLEEVE

Repair sleeve part number 6736-29-2110

If an oversize bore of more than diameter 1.00 mm is needed, the hole must be made in the block again and the repair sleeve installed. After installing, the sleeve bore must be finished again to a diameter of 102.020±0.020 mm. Use the standard diameter piston and service piston ring set.



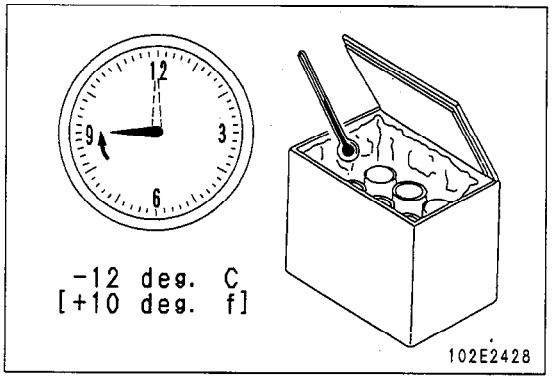
Making a new hole in block for repair sleeve

A = 104.515 + 0.015 mm
104.500 — 0.000 mm

B = 6.35 mm

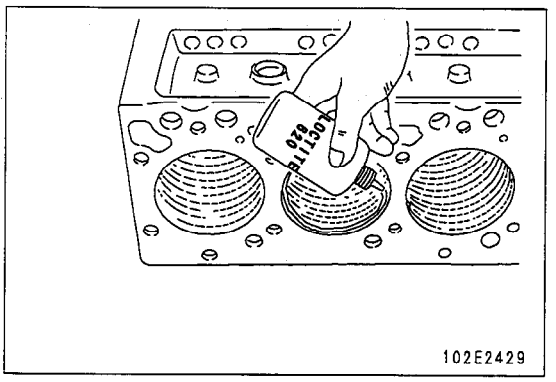
After completely making the hole, remove all metal chips, particles, and oil completely from the bore, and install the repair sleeve.

Cool the repair sleeve at –12°C (+10°F) for at least one hour. Remove the sleeves one at a time and install them to the block as follows.



673501

When installing the sleeve, coat each bore one at a time with Loctite™620.



Using protective gloves, push the frozen sleeves as far as possible into the bore by hand.