SEBM016404

SHOP MANUAL

KOMATSU®

PC75UU-3

MACHINE MODEL	SERIAL NUMBER
PC75UU-3	**15001 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.

- PC75UU-3 mount the 4D102-1 and 4D95LE-2 engine.
  For details of the engine, see the 102 Series and 95-2 Series Engine Shop Manual.

MidWestTech | Komatsu PC75UU-3 Mini Excavator Service Manual | Publication SEBM016404
Order the manual at mid-west-tech.com >

CONTENTS

No. of page

01 GENERAL 01-1

10 STRUCTURE AND FUNCTION 10-1

20 TESTING AND ADJUSTING 20-1

30 DISASSEMBLY AND ASSEMBLY 30-1

40 MAINTENANCE STANDARD 40-1

90 OTHERS 90-1

MidWestTech | Komatsu PC75UU-3 Mini Excavator Service Manual | Publication SEB... Order the manual at mid-west-tech.com >

FUNCTION

- This reduces the discharge pressure of the main pump and supplies it as the control pressure of the electromagnetic valves and PPC valves.

OPERATION

1. **Engine stopped**

- Poppet (7) is pushed against the seat by spring (8): **Pr** → **T** closed
- Valve (1) is pushed against the plug by spring (9): **P1** → **Pr** open
- Valve (2) is pushed by spring (3) and spring (4): **P1** → **P2** closed

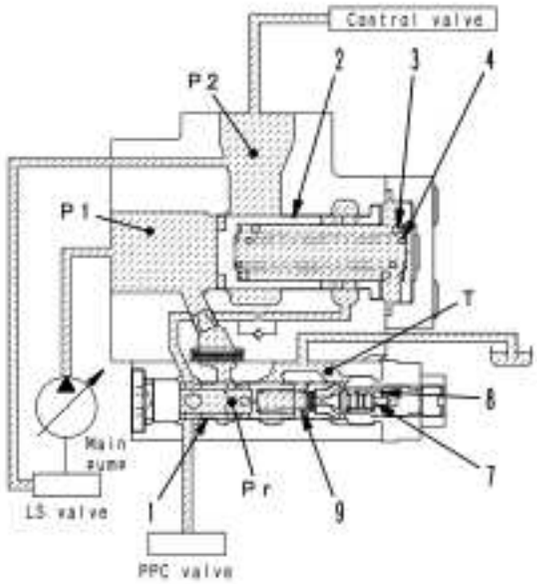
2. ① **At HOLD**
   ② **When load (pressure P2) is low (operations where work equipment moves under own weight, such as jib LOWER)**

   Note: When pressure P2 (load pressure) is lower than self-pressure reducing valve output pressure (pressure **Pr**)

   Valve (2) is subjected to force from spring (3), spring (4), and pressure **Pr** (0 kg/cm^2 when engine is stopped) in the direction to close the circuit between port **P1** → **P2**. However, if hydraulic oil flows in from port **P1** (pressure **P1**), (force of spring (3) and spring (4) + area ø **d** of valve (2) x pressure **Pr**) are balanced, and the opening between **P1** and **P2** is adjusted in order to maintain pressure **P1** at the above set value for pressure **Pr**.

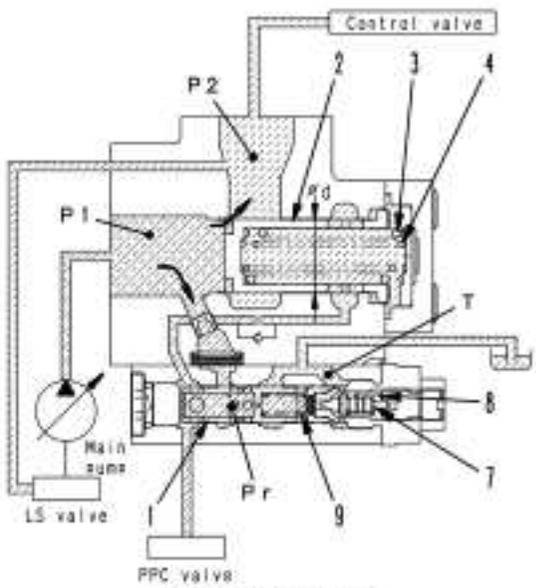
- If pressure **Pr** goes above the set pressure, poppet (7) opens and hydraulic oil flows from port **Pr** → spool (1) hole → poppet (7) opening → tank **T** circuit.

  As a result, a difference in pressure is generated on both sides of spool (1) hole, so spool (1) moves in the direction to close the opening between **P1** → **Pr**, and pressure **Pr** is maintained at the certain pressure by which pressure **P1** is reduced (set pressure) by the amount of this opening.



Engine stopped

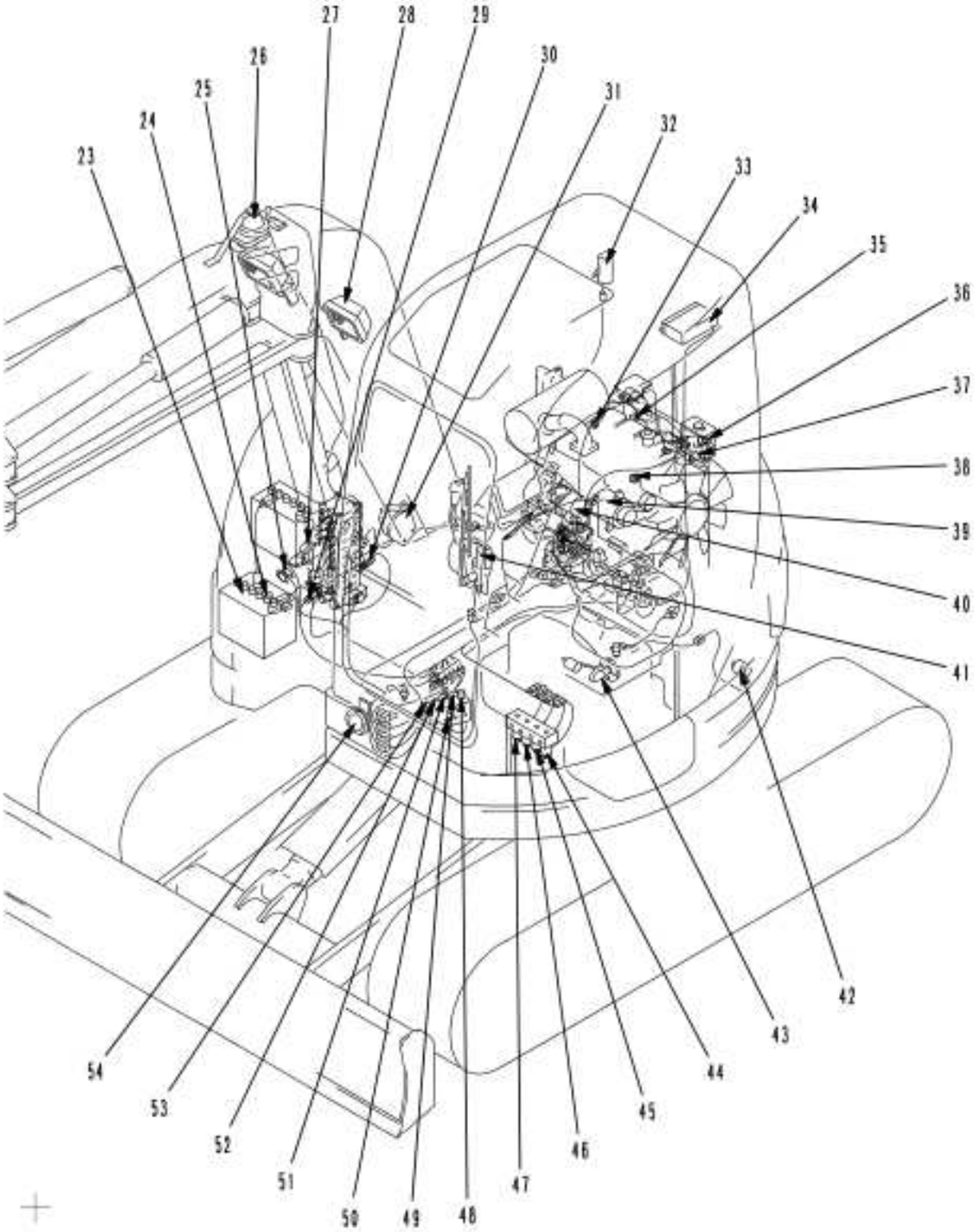
SJP07971



At low load pressure
(Jib LOWER, moving down under own weight)

SJP07972

MidWestTech | Komatsu PC75UU-3 Mini Excavator Service Manual | Publication SEB... Order the manual at mid-west-tech.com >

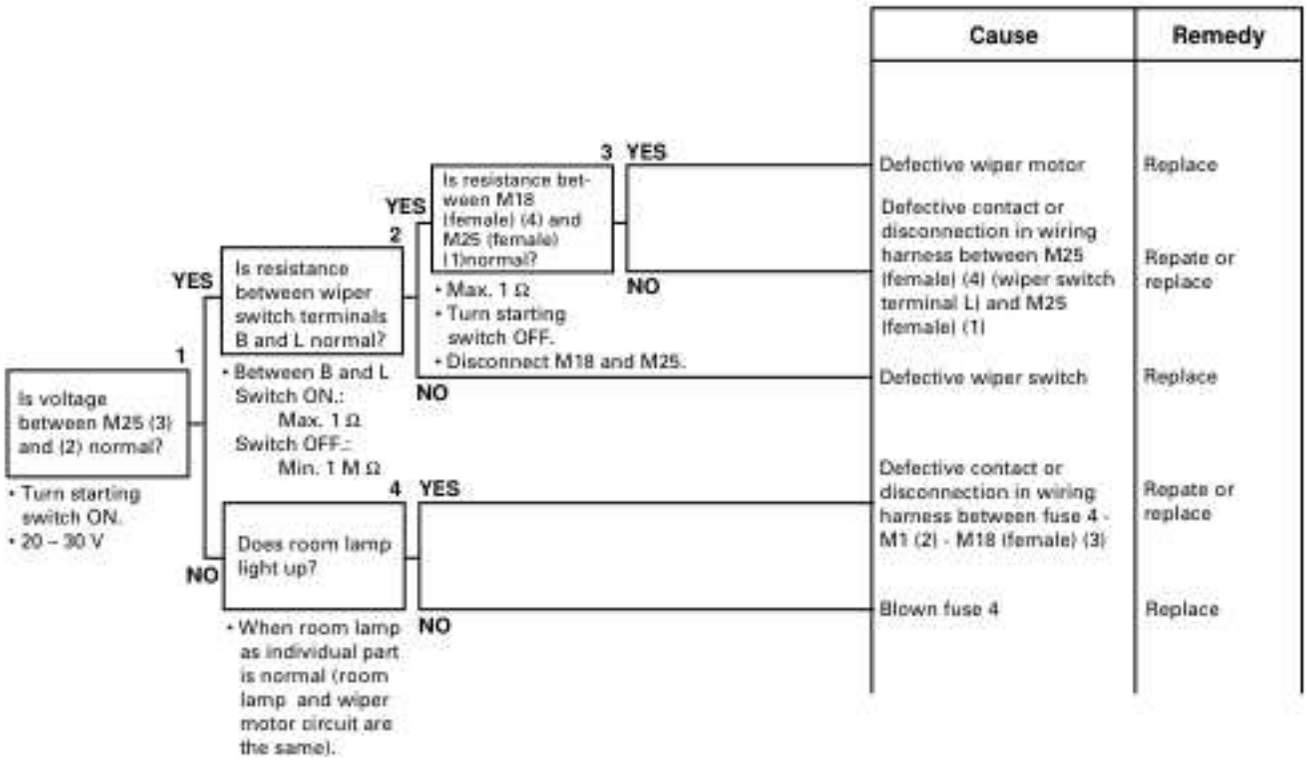


SVPD4504

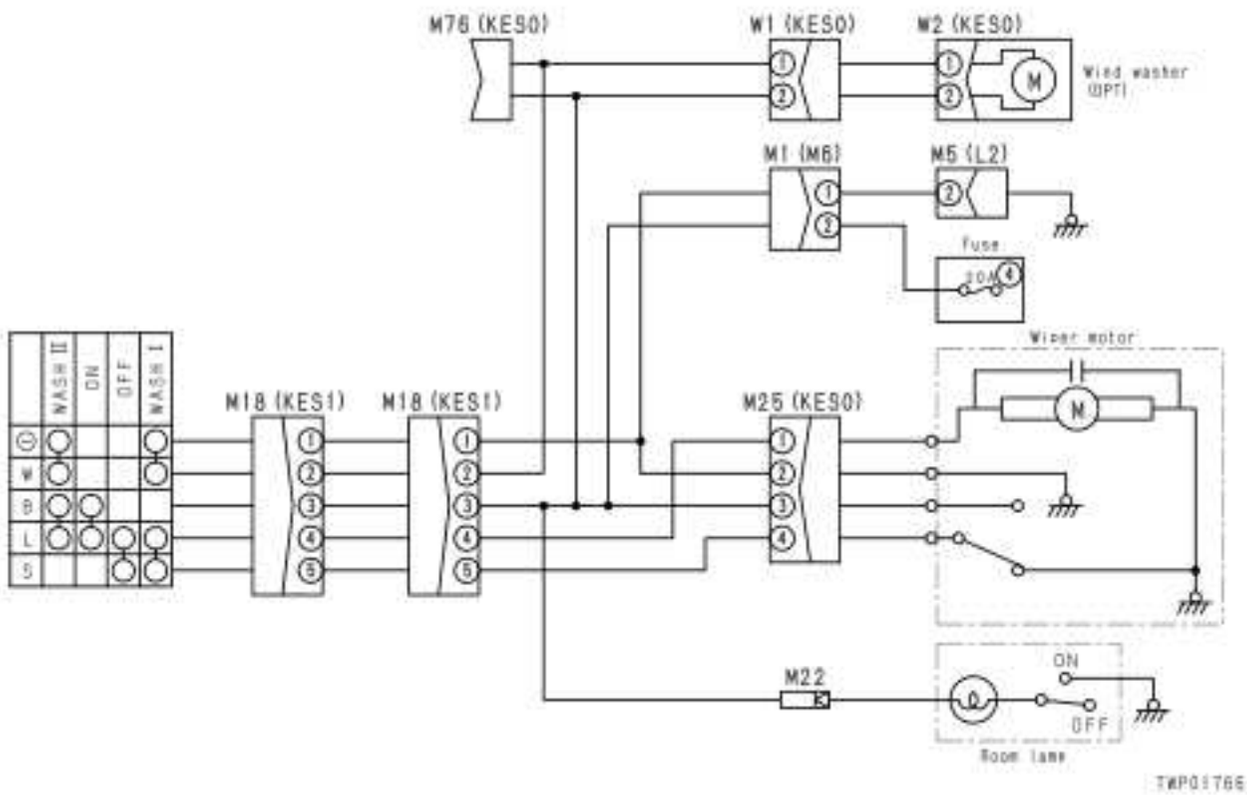
MidWestTech | Komatsu PC75UU-3 Mini Excavator Service Manual | Publication SEB... Order the manual at mid-west-tech.com >

E-28 Wiper does not work

★ Before carrying out troubleshooting, check that all the related connectors are properly inserted.
★ Always connect any disconnected connectors before going on the next step.



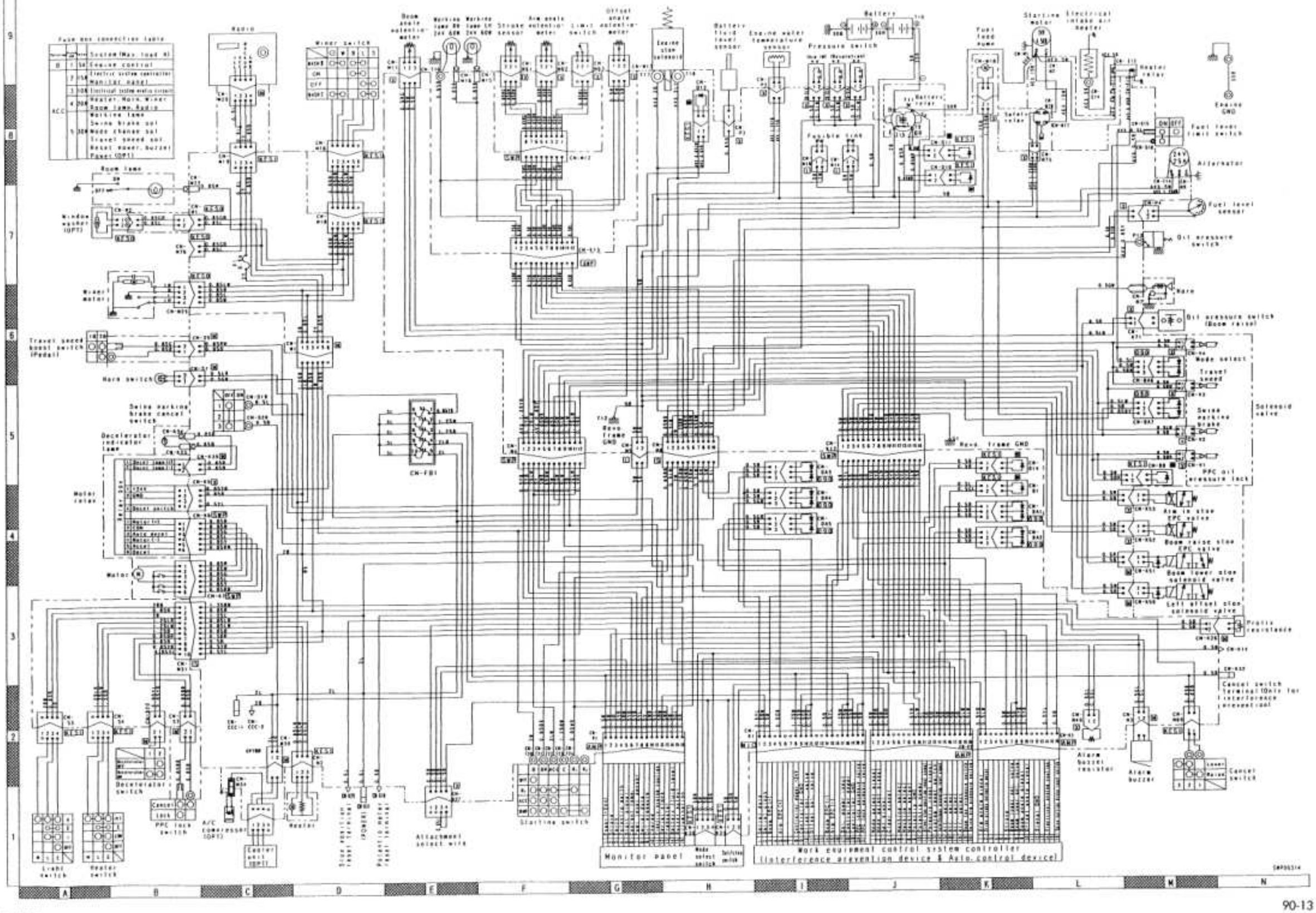
E-28 Related electrical circuit diagram



MidWestTech | Komatsu PC75UU-3 Mini Excavator Service Manual | Publication SEB... Order the manual at mid-west-tech.com >

ELECTRICAL CIRCUIT DIAGRAM

LONG ARM SPEC.



90-13

PC75UU-3

MidWestTech | Komatsu PC75UU-3 Mini Excavator Service Manual | Publication SEBM016404

Order the manual at mid-west-tech.com >