CEBD003001

Shop Manual

KOMATSU®

PC270LC-6LE

HYDRAULIC EXCAVATOR

MACHINE MODEL	SERIAL NUMBERS
PC270LC-6LE	A83001 and up

This material is proprietary to Komatsu America International Company and is not to be reproduced, used, or disclosed except in accordance with written authorization from Komatsu America International Company.

It is our policy to improve our products whenever it is possible and practical to do so. We reserve the right to mak e changes or add improvements at any time without incurring any obligation to install such changes on products sol d previously.

Due to this continuous program of research and development, periodic revisions may be made to this publication. It is recommended that customers contact their distributor for information on the latest revision.

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

CONTENTS

01	General	01-1
10	Structure and function	10-1
20	Testing, adjusting and troubleshooting	20-1
30	Disassembly and assembly	30-1
40	Maintenance standard	40-1

MidWestTech | Komatsu PC270LC-6LE Hydraulic Excavator Service Manual | Publication... Order the manual at mid-west-tech.com >

The affected pages are indicated by using the following marks. It is requested that necessary actions be taken to these pages according to the table below.

Mark	Indication	Action
"	New page to be added	Add
!	Page to be replaced	Replace
( )	Page to be deleted	Discard

Pages without marks were previous additions or revised pages.

LIST OF ORIGINAL, NEW AND REVISED PAGES

MARK	PAGE	REV	MARK	PAGE	REV	MARK	PAGE	REV	MARK	PAGE	REV
	00-1			10-3			10-33			10-63	
	00-4			10-4			10-34			10-64	
	00-5			10-5			10-35			10-65	
	00-6			10-6			10-36			10-66	
	00-7			10-7			10-37			10-67	
	00-8			10-8			10-38			10-68	
	00-9			10-9			10-39			10-69	
	00-10			10-10			10-40			10-70	
	00-11			10-11			10-41			10-71	
	00-12			10-12			10-42			10-72	
	00-13			10-13			10-43			10-73	
	00-14			10-14			10-44			10-74	
	00-15			10-15			10-45			10-75	
	00-16			10-16			10-46			10-76	
	00-17			10-17			10-47			10-77	
	00-18			10-18			10-48			10-78	
	01-1			10-19			10-49			10-79	
	01-2			10-20			10-50			10-80	
	01-3			10-21			10-51			10-81	
	01-4			10-22			10-52			10-82	
	01-5			10-23			10-53			10-83	
	01-6			10-24			10-54			10-84	
	01-7			10-25			10-55			10-85	
	01-8			10-26			10-56			10-86	
	01-9			10-27			10-57			10-87	
	01-10			10-28			10-58			10-88	
	01-11			10-29			10-59			10-89	
	01-12			10-30			10-60			10-90	
	10-1			10-31			10-61			10-91	
	10-2			10-32			10-62			10-92	

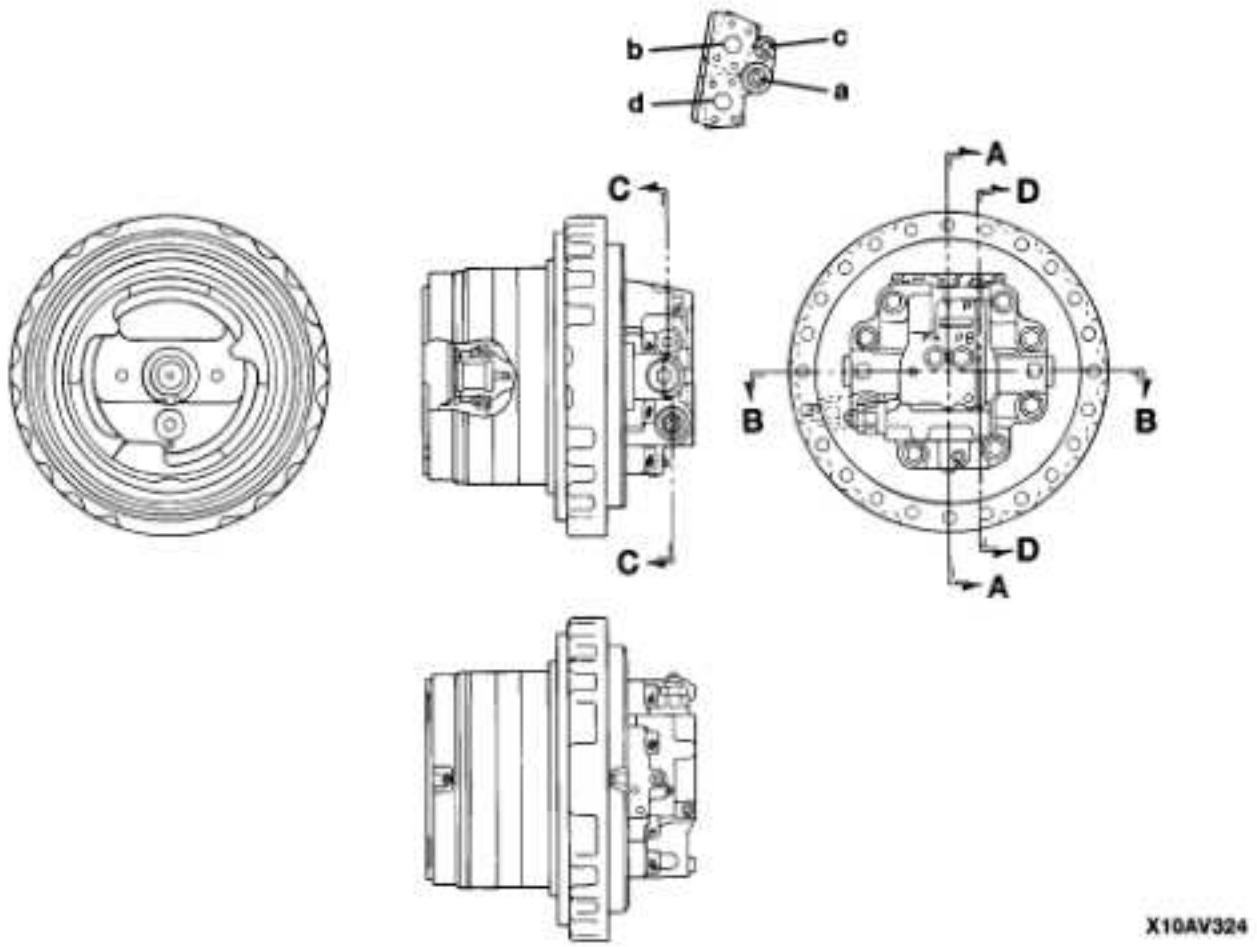
MidWestTech | Komatsu PC270LC-6LE Hydraulic Excavator Service Manual | Publication... Order the manual at mid-west-tech.com >

LIST OF ORIGINAL, NEW AND REVISED PAGES

MARK	PAGE	REV	MARK	PAGE	REV	MARK	PAGE	REV	MARK	PAGE	REV
	10-93			10-130			10-167		"	20-8	"
	10-94			10-131			10-168		"	20-9	"
	10-95			10-132			10-169		"	20-10	"
	10-96			10-133			10-170		"	20-11	"
	10-97			10-134			10-171		"	20-12	"
	10-98			10-135			10-172		"	20-13	"
	10-99			10-136			10-173		"	20-14	"
	10-100			10-137			10-174		"	20-15	"
	10-101			10-138			10-175		"	20-16	"
	10-102			10-139			10-176		"	20-17	"
	10-103			10-140			10-177		"	20-18	"
	10-104			10-141			10-178		"	20-19	"
	10-105			10-142			10-179		"	20-20	"
	10-106			10-143			10-180		"	20-21	"
	10-107			10-144			10-181		"	20-22	"
	10-108			10-145			10-182		"	20-23	"
	10-109			10-146			10-183		"	20-24	"
	10-110			10-147			10-184		"	20-25	"
	10-111			10-148			10-185		"	20-26	"
	10-112			10-149			10-186		"	20-27	"
	10-113			10-150			10-187		"	20-28	"
	10-114			10-151			10-188		"	20-29	"
	10-115			10-152			10-189		"	20-30	"
	10-116			10-153			10-190		"	20-31	"
	10-117			10-154			10-191		"	20-32	"
	10-118			10-155			10-192		"	20-33	"
	10-119			10-156			10-193		"	20-34	"
	10-120			10-157			10-194		"	20-35	"
	10-121			10-158			10-195		"	20-36	"
	10-122			10-159			10-196		"	20-37	"
	10-123			10-160	"	20-1	"		"	20-38	"
	10-124			10-161	"	20-2	"		"	20-39	"
	10-125			10-162	"	20-3	"		"	20-40	"
	10-126			10-163	"	20-4	"		"	20-41	"
	10-127			10-164	"	20-5	"		"	20-42	"
	10-128			10-165	"	20-6	"		"	20-43	"
	10-129			10-166	"	20-7	"		"	20-44	"

MidWestTech | Komatsu PC270LC-6LE Hydraulic Excavator Service Manual | Publication... Order the manual at mid-west-tech.com >

TRAVEL MOTOR



a. Port **PB** (from control valve)
b. Port **PA** (from control valve)
c. Port **T** (to tank)
d. Port **P** (from travel speed solenoid valve)

Item		Specification
Type		HMV160ADT-2
Theoretical Delivery	Min.	100 cc/rpm
	Max.	160.8 cc/rev
Set pressure		34.79 MPa (355 kg/cm^2)
Rated speed	Lo	1,310 rpm
	HI	2,107 rpm
Brake releasing pressure		1.18 MPa (12 kg/cm^2)
Travel speed switch pressure		0.78 MPa (8 kg/cm^2)

MidWestTech | Komatsu PC270LC-6LE Hydraulic Excavator Service Manual | Publication... Order the manual at mid-west-tech.com >

TROUBLESHOOTING OF COMMUNICATION ABNORMALITY SYSTEM (N MODE)

N-1 [E218] Communications abnormality

- This troubleshooting is carried out when there is still an abnormality, so when disconnecting the connector and inserting the T-adapter, or when removing the T-adapter and returning the connector to its original position, if an E service code is not displayed, the problem has been removed.
- If the starting switch is turned OFF after an abnormality occurs, turn the starting switch ON and check if an E service code is displayed. (If it is not displayed, the problem has been removed.)
- 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.

Chart 1. Troubleshooting diagnostics

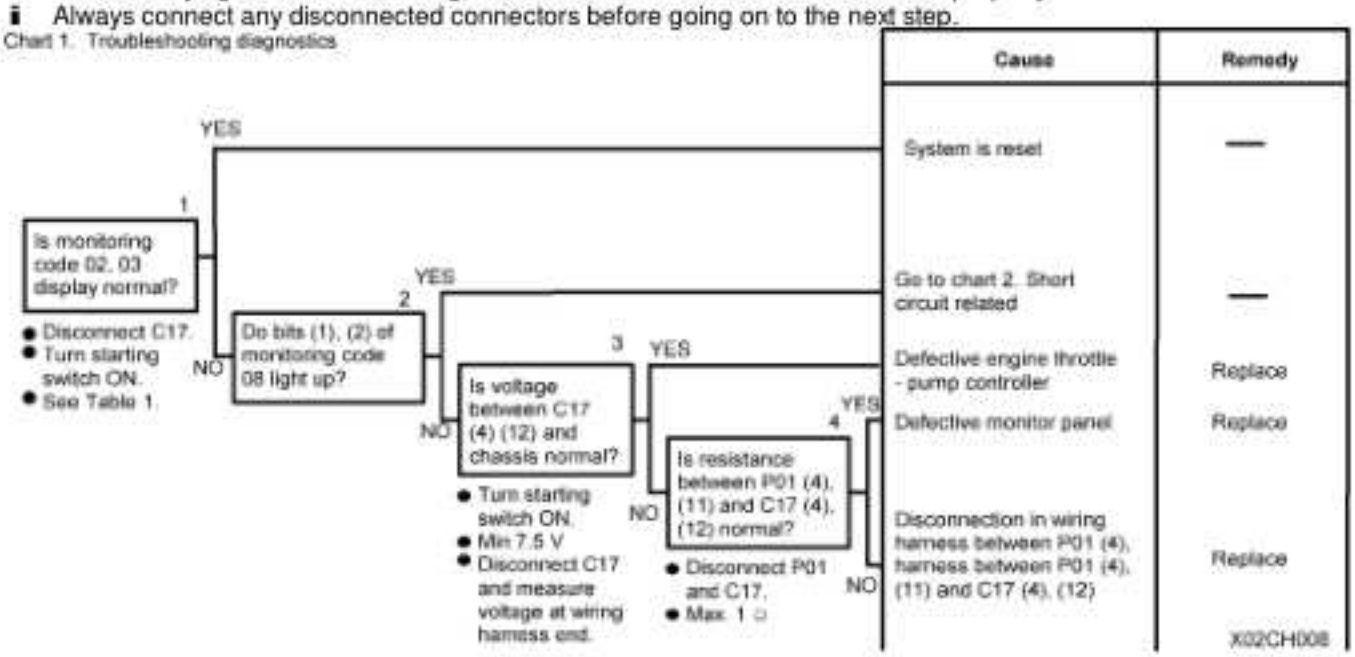
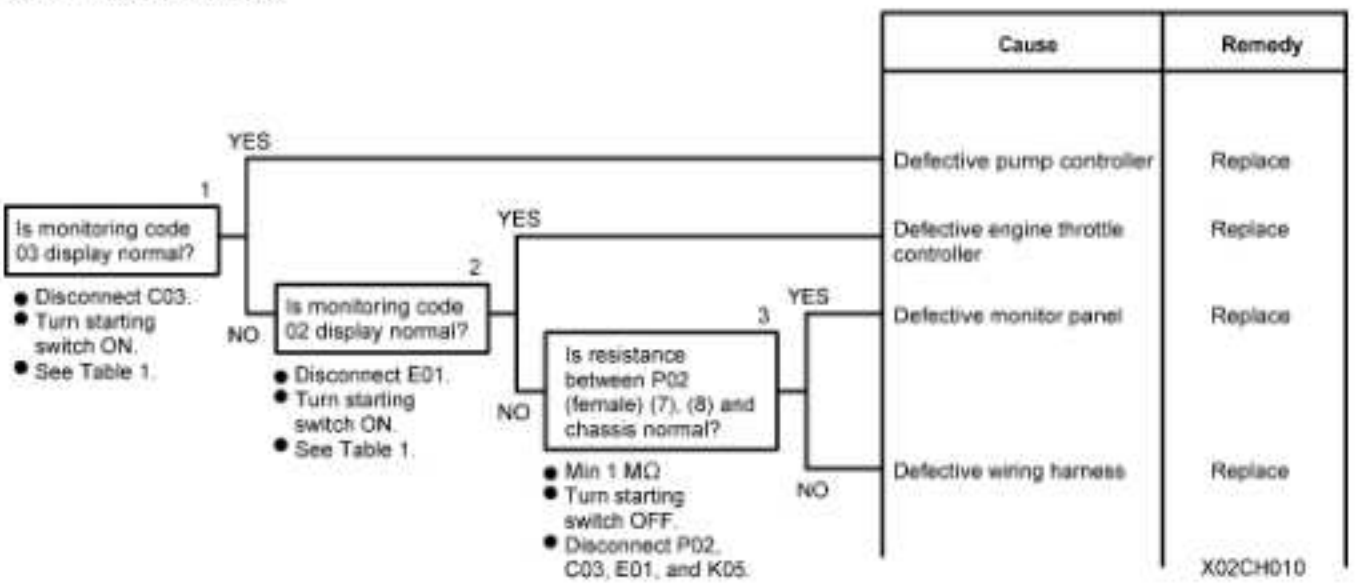
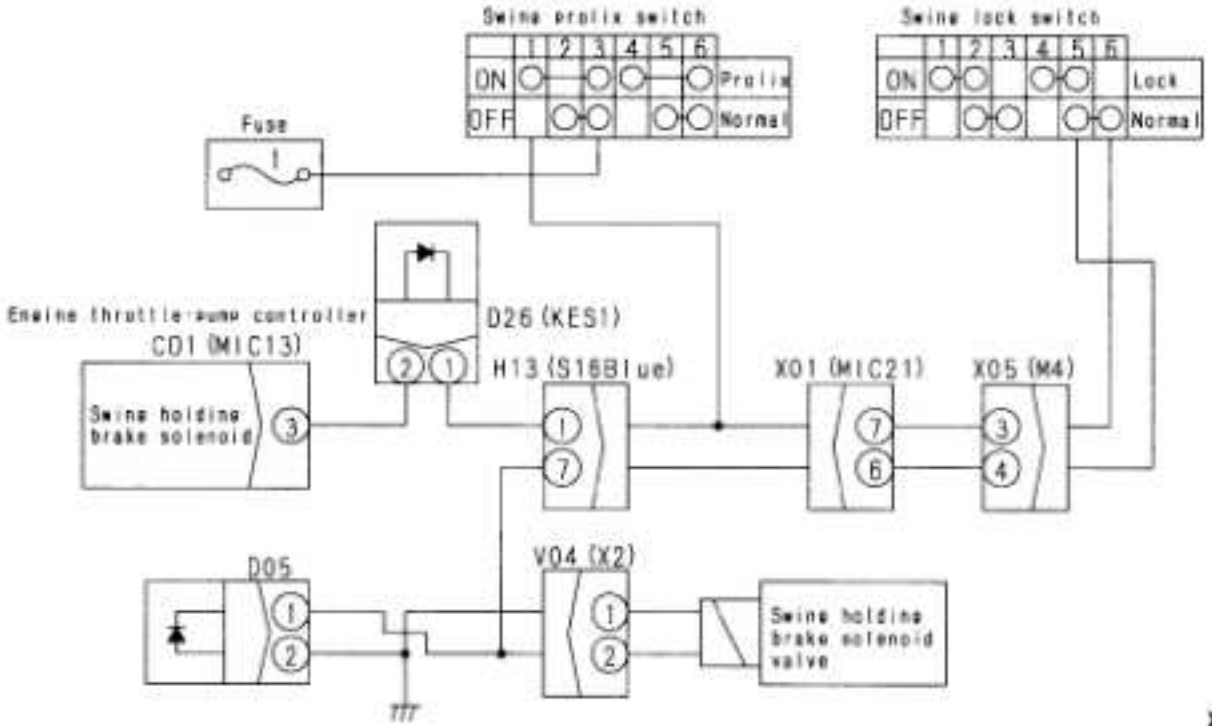


Chart 2. Short circuit related



MidWestTech | Komatsu PC270LC-6LE Hydraulic Excavator Service Manual | Publication... Order the manual at mid-west-tech.com >

C-4 Related electric circuit diagram

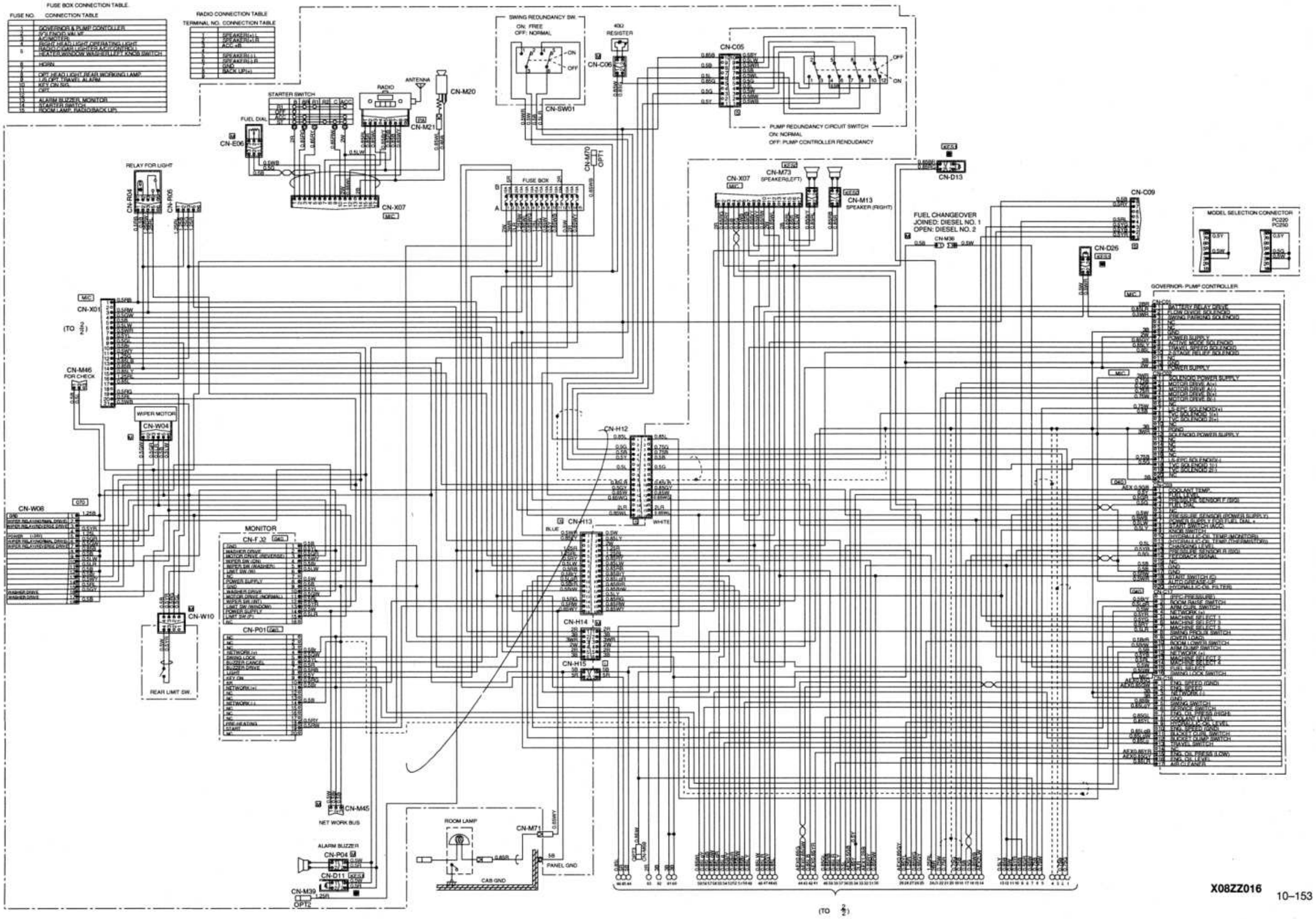


X08DD276

MidWestTech | Komatsu PC270LC-6LE Hydraulic Excavator Service Manual | Publication... Order the manual at mid-west-tech.com >

ELECTRICAL CIRCUIT DIAGRAM

FOLDOUT 13



X08ZZ016

MidWestTech | Komatsu PC270LC-6LE Hydraulic Excavator Service Manual | Publication CEBD003001 Order the manual at mid-west-tech.com >