CASE CONSTRUCTION

SERVICE MANUAL

HYDRAULIC EXCAVATOR

CX17B

NATN16300~
S5PU0018E01

Issued March 2010

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

1. OUTLINE

TABLE OF CONTENTS

1.1 GENERAL PRECAUTIONS FOR REPAIRS 1-3
1.1.1 PREPARATION BEFORE DISASSEMBLING 1-3
1.1.2 SAFETY IN DISASSEMBLING AND ASSEMBLING 1-3
1.1.3 DISASSEMBLING AND ASSEMBLING HYDRAULIC EQUIPMENT 1-4
1.1.4 ELECTRICAL EQUIPMENT 1-6
1.1.5 HYDRAULIC PARTS 1-7
1.1.6 WELDING REPAIR 1-7
1.1.7 ENVIRONMENTAL MEASURE 1-7
1.2 INTERNATIONAL UNIT CONVERSION SYSTEM (Based on MARKS' STANDARD HANDBOOK FOR MECHANICAL ENGINEERS) 1-8

Book Code No. **S5PA0105E01**

MidWestTech | Case CX17B Hydraulic Excavator Service Manual | Publication S5PU0... Order the manual at mid-west-tech.com >

2. SPECIFICATIONS

TABLE OF CONTENTS

2.1 COMPONENTS NAME 2-3
2.2 MACHINE DIMENSIONS 2-4
2.3 SPECIFICATIONS AND PERFORMANCE 2-5
2.4 MACHINE & COMPONENTS WEIGHT (DRY) 2-6
2.5 TRANSPORTATION 2-8
2.6 TYPE OF CRAWLER SHOES 2-11
2.7 TYPE OF BUCKET 2-12
2.8 ENGINE SPECIFICATIONS 2-13
2.8.1 SPECIFICATIONS 2-13
2.8.2 ENGINE PERFORMANCE CURVE 2-14

Book Code No. **S5PU0217E01**

MidWestTech | Case CX17B Hydraulic Excavator Service Manual | Publication S5PU0... Order the manual at mid-west-tech.com >

3. ATTACHMENT DIMENSIONS

TABLE OF CONTENTS

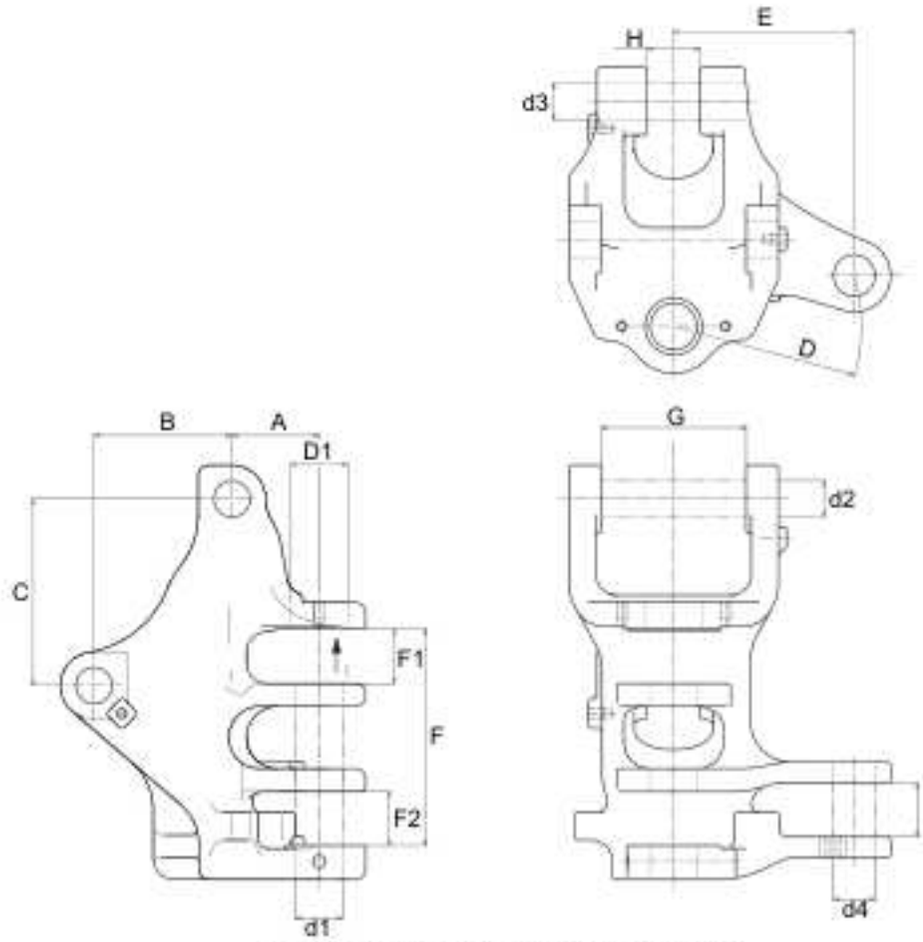
3.1 BOOM 3-3
3.1.1 BOOM DIMENSIONAL DRAWINGS 3-3
3.1.2 BOOM MAINTENANCE STANDARDS 3-4
3.2 ARM 3-8
3.2.1 ARM DIMENSIONAL DRAWINGS 3-8
3.2.2 ARM MAINTENANCE STANDARDS 3-10
3.3 BUCKET 3-14
3.3.1 BUCKET DIMENSIONAL DRAWINGS 3-14
3.3.2 DETAIL DIMENSIONAL DRAWINGS OF LUG SECTION 3-15
3.3.3 DETAIL DIMENSIONAL DRAWINGS OF BOSS SECTION 3-15
3.4 DOZER 3-16
3.4.1 DOZER DIMENSIONAL DRAWINGS 3-16
3.4.2 DOZER MAINTENANCE STANDARDS 3-18
3.5 SWING 3-20
3.5.1 SWING BRACKET DIMENSIONAL DRAWINGS 3-20
3.5.2 SWING PORTION MAINTENANCE STANDARDS 3-21

Book Code No. **S5PU0314E01**

MidWestTech | Case CX17B Hydraulic Excavator Service Manual | Publication S5PU0... Order the manual at mid-west-tech.com >

3.5 SWING

3.5.1 SWING BRACKET DIMENSIONAL DRAWINGS



Swing bracket dimensional drawings

No.	NAME	DIMENSION [mm(in)]
A	Distance between swing center pin and boom foot pin	84 (3.30)
B	Distance between boom foot pin and boom cylinder pin	133 (5.24)
C	- ditto -	180 (7.09)
D	Distance between swing center pin and swing cylinder pin	R181 (7.13)
E	- ditto -	174.2 (6.86)
F	Inside width of swing center	209 (8.23)
F1	- ditto -	52.8 (2.08)
F2	- ditto -	51.8 (2.04)
G	Inside width of boom foot	140 (5.51)
H	Inside width for installing boom cylinder	51 (2.01)
J	Inside width for installing swing cylinder	52 (2.05)
D1	Bushing outer dia	55 dia.(2.17")
d1	Pin dia. of swing center	45 dia.(1.77")
d2	Pin dia. of boom foot	35 dia.(1.38")
d3	Pin dia. of boom cylinder	35 dia.(1.38")
d4	Pin dia. of swing cylinder	40 dia.(1.57")

MidWestTech | Case CX17B Hydraulic Excavator Service Manual | Publication S5PU0... Order the manual at mid-west-tech.com >

23.2.2 HARNESS & CABLE LIST

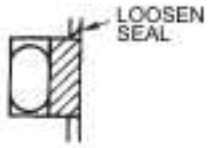
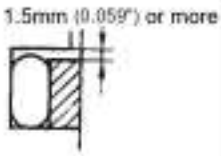
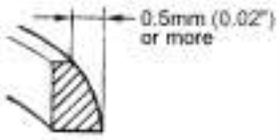
Code	Name		Part No.	Remarks
H-1	Main Harness		PU13E01046P3	
H-4	Starter Cable (+)		PU13E01049P2	
H-5	Battery Ground Cable (-)		PU13E01050P1	
H-6	Engine Ground Cable		PU13E01051P1	
H-7	Boom Harness	Canopy	PU15E01004P3	
		Cab	PU15E01005P1	(OPT)
H-8	Key Switch Harness		PW50E01002P1	
H-9	Hand Rail Work Light Harness		PU11E01004P1	
H-10	Boom Work Light Extension Harness		PU13E01052P2	
H-11	Connection Harness with Cab		PU13E01061P1	(OPT.)
H-13	Travel Alarm Harness		PW13E01069P1	(OPT.)
H-14	Alarm Extension Harness		PU13E01056P1	(OPT.)
H-15	Heater Harness		PU13E01039P1	(OPT.)
H-16	Pressure SW. Extension Harness		PU13E01059P1	
H-17	Jamper Connector		PW14E01018P1	(OPT.)

Note

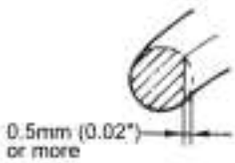
The part number may be changed owing to modification, use them only for reference.

MidWestTech | Case CX17B Hydraulic Excavator Service Manual | Publication S5PU0... Order the manual at mid-west-tech.com >

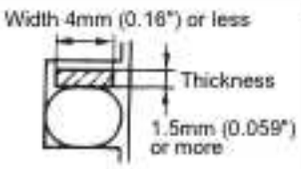
(3) Slipper Seal

	Judgment Criteria	Remedy
	- Seal is excessively extruded from groove.	Replace
	- Slipper seal width is 1.5 mm (0.059 in) or more smaller than the width of the seal groove.	Replace
	- Unequal wear of 0.5 mm (0.020 in) or more.	Replace

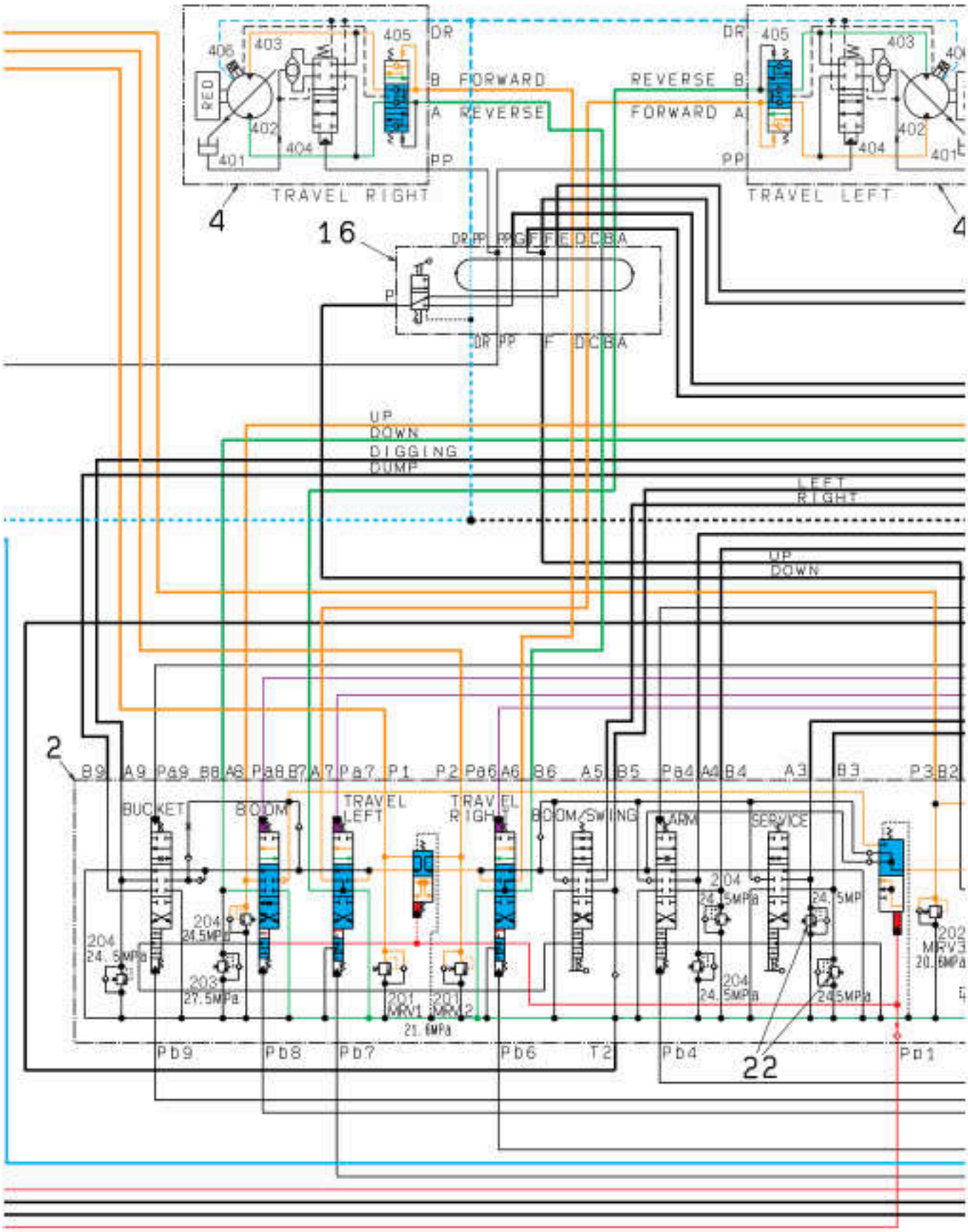
(4) O-ring

	Judgment Criteria	Remedy
	- O-ring is excessively extruded from groove.	Replace
	- Unequal wear of 0.5 mm (0.020 in) or more.	Replace

(5) Backup Ring

	Judgment Criteria	Remedy
	- Thickness of 1.5 mm (0.059 in) or less Width of 4 mm (0.16 in) or less.	Replace

MidWestTech | Case CX17B Hydraulic Excavator Service Manual | Publication S5PU0... Order the manual at mid-west-tech.com >



No.	NAME	PRESSURE:MPa (psi)	No.	
201	MAIN RELIEF VALVE P1,P2	21.6 (3130)	204 22	OVER
202	MAIN RELIEF VALVE P3	20.6 (2990)	304	SLEW
203	OVER LOAD RELIEF VALVE	27.5 (3990)	13-1	PILOT

Combined operation circuit : Travel (forward) 1st speed / Boom up operation

MidWestTech | Case CX17B Hydraulic Excavator Service Manual | Publication S5PU0... Order the manual at mid-west-tech.com >

⚠ CAUTION

About warning labels

Maintenance of warning labels

Make sure all warning/caution labels are legible.

Clean or replace the warning/caution labels the description and/or illustration of which cannot be seen clearly.

For cleaning the warning/caution labels, use a cloth, water and soap. Do not use cleaning solvents, gasoline or other chemicals to prevent the letters from getting blurred or the adhesion from being weakened.

Replace damaged or fractured labels with new ones.

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

To obtain replacement warning labels, contact a Mitsubishi dealer.



Warning labeles

X

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