WEAM002800A

Operation & Maintenance Manual

KOMATSU®

PC75R-2

HYDRAULIC EXCAVATOR

SERIAL NUMBERS PC75R-2 - 22E5200001 and up

MARCH 2001

Copyright 2001 Komatsu

MidWestTech | Komatsu PC75R-2 Hydraulic Excavator Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

CONTENTS

Page

1.1 FOREWORD 1
1.2 INFORMATION ON SAFETY 2
1.3 INTRODUCTION 4
1.3.1 INTENDED USES 4
1.3.2 IMPROPER OR UNAUTHORIZED USE 4
1.3.3 MAIN CHARACTERISTICS 5
1.3.4 RUNNING-IN 5
1.4 PRODUCT IDENTIFICATION 6
1.4.1 MACHINE SERIAL NUMBER 6
1.4.2 MACHINE IDENTIFICATION PLATE 6
1.4.3 ENGINE SERIAL NUMBER AND EMISSION LABEL 7
1.4.4 TRAVEL REDUCTION GEAR SERIAL NUMBER 7
1.4.5 SWING REDUCTION GEAR SERIAL NUMBER 8
1.4.6 CAB SERIAL NUMBER 8
1.4.7 SERIAL NUMBERS AND DEALER'S ADDRESS 9

SAFETY AND ACCIDENT PREVENTION

2.1 SAFETY PLATES 18
2.1.1 POSITION OF THE SAFETY PLATES 18
2.1.2 POSITION OF THE PICTOGRAMS 34
2.1.3 PICTOGRAMS AND RELEVANT MEANINGS 35
2.1.4 VIBRATIONS TO WHICH THE OPERATOR IS SUBJECTED 37
2.2 GENERAL PRECAUTIONS 38
2.2.1 GENERAL SAFETY RULES 38
2.2.2 SAFETY DEVICES AND GUARDS 38
2.2.3 CLOTHING AND PERSONAL PROTECTION ITEMS 38
2.2.4 UNAUTHORIZED MODIFICATIONS 39
2.2.5 LEAVING THE OPERATOR'S SEAT 39
2.2.6 GETTING ON AND OFF THE MACHINE 40
2.2.7 PREVENTING FIRES DUE TO FUEL AND OIL 40
2.2.8 PREVENTING BURNS 41
2.2.9 PREVENTING DAMAGE DUE TO ASBESTOS POWDER 41
2.2.10 PREVENTING DAMAGE CAUSED BY THE WORK EQUIPMENT 42
2.2.11 FIRE EXTINGUISHERS AND FIRST AID KIT 42
2.2.12 PRECAUTIONS CONCERNING THE CAB STRUCTURE 42
2.2.13 PRECAUTIONS CONCERNING THE EQUIPMENT 42
2.3 PRECAUTIONS TO BE TAKEN BEFORE STARTING THE ENGINE 43
2.3.1 SAFETY ON THE WORK SITE 43
2.3.2 FIRE PREVENTION 43
2.3.3 PRECAUTIONS TO BE TAKEN FOR THE OPERATOR'S CAB 43
2.3.4 ROOM VENTILATION 44
2.3.5 PRECAUTIONS TO BE TAKEN FOR THE LIGHTS 44
2.3.6 CLEANING THE WINDOWS AND THE REAR-VIEW MIRRORS - CHECKING THE WINDSHIELD WIPER BLADES 44

MidWestTech | Komatsu PC75R-2 Hydraulic Excavator Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

Page

2.4 PRECAUTIONS TO BE TAKEN WHEN WORKING 45
2.4.1 STARTING THE ENGINE 45
2.4.2 CHECK THE DIRECTION BEFORE STARTING THE MACHINE 45
2.4.3 CHECKS FOR TRAVELLING IN REVERSE 45
2.4.4 MOVING THE MACHINE 46
2.4.5 MOVING ON SLOPES 47
2.4.6 WORKING ON SLOPES 48
2.4.7 UNAUTHORIZED OPERATIONS 48
2.4.8 PREVENTING ELECTROCUTION 49
2.4.9 VISIBILITY 50
2.4.10 WORKING ON ICY OR SNOW-COVERED SURFACES 50
2.4.11 PREVENTING DAMAGE CAUSED BY THE WORK EQUIPMENT 50
2.4.12 WORKING ON LOOSE GROUND 50
2.4.13 PARKING THE MACHINE 51
2.5 TRANSPORTING THE MACHINE ON OTHER VEHICLES 52
2.5.1 LOADING AND UNLOADING THE MACHINE 52
2.5.2 SHIPPING 52
2.6 BATTERY 53
2.6.1 SAFETY PRECAUTIONS FOR WORK ON BATTERIES 53
2.6.2 STARTING WITH BOOSTER CABLES 53
2.7 PRECAUTIONS FOR EMERGENCY RECOVERY 54
2.8 PRECAUTIONS TO BE TAKEN DURING MAINTENANCE 55
2.8.1 WARNING PLATES 55
2.8.2 TOOLS 55
2.8.3 PERSONNEL 56
2.8.4 EQUIPMENT 56
2.8.5 WORKING UNDER THE MACHINE 56
2.8.6 KEEPING THE MACHINE CLEAN 56
2.8.7 USE OF THE ENGINE DURING MAINTENANCE 57
2.8.8 PERIODICAL CHANGE OF THE PARTS THAT ARE CRITICAL FOR SAFETY 57
2.8.9 STOP THE ENGINE BEFORE CARRYING OUT ANY MAINTENANCE OPERATION OR INSPECTION 57
2.8.10 RULES FOR REFUELLING AND ADDING OIL 58
2.8.11 CHECKING THE COOLANT LEVEL IN THE RADIATOR 58
2.8.12 USING LAMPS 58
2.8.13 PRECAUTIONS CONCERNING THE BATTERY AND THE ALTERNATOR 59
2.8.14 PRECAUTIONS CONCERNING THE STARTER 59
2.8.15 PRECAUTIONS CONCERNING HIGH-PRESSURE HOSES 60
2.8.16 PRECAUTIONS TO BE TAKEN WHEN WORKING ON HIGH-PRESSURE SYSTEMS 60
2.8.17 PRECAUTIONS FOR MAINTENANCE WORK INVOLVING HIGH TEMPERATURES AND PRESSURES 60
2.8.18 COOLING FAN AND FAN BELT 61
2.8.19 WASTE MATERIALS 61

MidWestTech | Komatsu PC75R-2 Hydraulic Excavator Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

Page

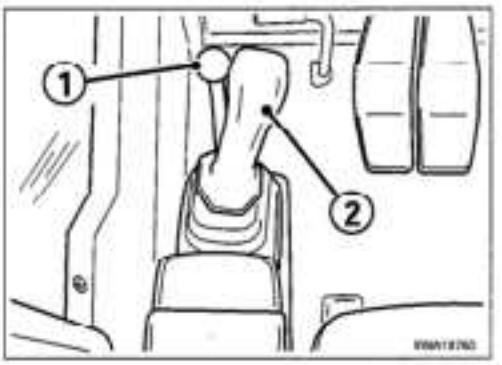
DESCRIPTION AND USE OF THE MACHINE

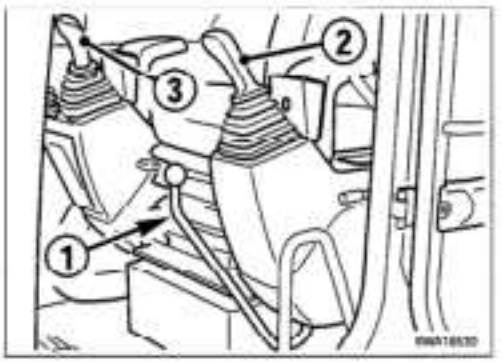
3.1 SAFETY LOCKS **64**
3.1.1 MACHINE LOCKS 64
3.2 GENERAL VIEWS **65**
3.2.1 FRONT GENERAL VIEW (MONOBOOM) 65
3.2.2 FRONT GENERAL VIEW (TWO-PIECE BOOM) 66
3.2.3 CAB INSIDE GENERAL VIEW 67
3.3 INSTRUMENTS AND CONTROLS **69**
3.3.1 INSTRUMENTS, WARNING LIGHTS AND PUSH BUTTONS 69
3.3.2 MACHINE CONTROLS 78
3.4 FUSES AND RELAYS **89**
3.4.1 CENTRAL UNIT FUSES AND RELAYS 89
3.4.1.1 CENTRAL UNIT FUSES 90
3.4.1.2 CENTRAL UNIT RELAYS 91
3.4.2 ENGINE LINE FUSES AND RELAYS 92
3.4.2.1 ENGINE LINE FUSES 92
3.4.2.2 ENGINE LINE RELAYS 93
3.5 GUARDS AND DRIVER'S SEAT **94**
3.5.1 ENGINE HOOD 94
3.5.2 SIDE COVER 94
3.5.3 CAB 95
3.5.4 VENTILATION AND HEATING 99
3.5.5 SEAT 100
3.5.6 SAFETY BELT 101
3.5.7 EMERGENCY EXIT 101
3.5.8 TECHNICAL DOCUMENTATION CASE 102
3.5.9 FIRE EXTINGUISHER 102
3.5.10 FIRST AID KIT 102
3.6 USE OF THE MACHINE **103**
3.6.1 CHECKS BEFORE STARTING THE ENGINE 103
3.6.1.1 VISUAL CHECKS 103
3.6.1.2 DAILY CHECKS 103
3.6.1.3 OPERATIONAL CHECKS 104
3.6.2 STARTING THE ENGINE 105
3.6.2.1 STARTING WITH WARM ENGINE OR IN TEMPERATE CLIMATES 105
3.6.2.2 STARTING WITH COLD ENGINE OR IN COLD CLIMATES 106
3.6.3 WARMING THE ENGINE 107
3.6.4 HEATING THE HYDRAULIC OIL 107
3.6.5 HOW TO MOVE THE MACHINE 107
3.6.5.1 STEERING (CHANGING DIRECTION) 109
3.6.5.2 MOVING ON SLOPES 110
3.6.5.3 MAXIMUM IMMERSION DEPTH 111
3.7 PARKING THE MACHINE **112**
3.7.1 PARKING ON LEVEL GROUND 112
3.7.2 PARKING ON SLOPES 113

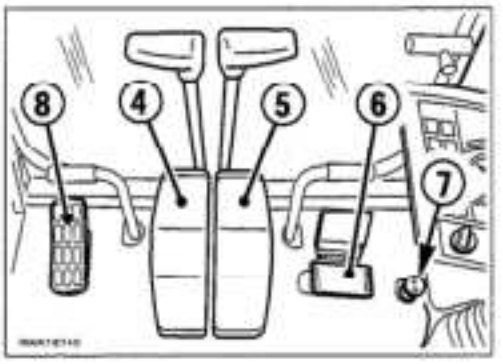
MidWestTech | Komatsu PC75R-2 Hydraulic Excavator Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

3.2.3 CAB INSIDE GENERAL VIEW

1 - Safety lever
2 - Arm – rotation control
3 - Lifting – bucket control
4 - Left track control pedal
5 - Right track control pedal
6 - Boom swing control pedal
7 - Hydraulic hammer control
8 - Optional equipment control pedal







MidWestTech | Komatsu PC75R-2 Hydraulic Excavator Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

4.7.5 MAINTENANCE AFTER THE FIRST 50 HOURS OF OPERATION
(Operations to be carried out together with those prescribed at point"4.7.6 MAINTENANCE EVERY 50 HOURS OF OPERATION")

N.	PART	OPERATION	PAGE
a	Fan belt	Check fan belt tension	177
b	Hydraulic oil drain filter	Change	180

4.7.6 MAINTENANCE EVERY 50 HOURS OF OPERATION

N.	PART	OPERATION	PAGE
a	Radiator	Check level	174
b	Swing joint	Lubricate (1 point)	174
c	Electrical system	Check	175

4.7.7 MAINTENANCE EVERY 100 HOURS OF OPERATION

N.	PART	OPERATION	PAGE
a	Ball-bearing ring	Lubricate (2 points)	176

4.7.8 MAINTENANCE AFTER THE FIRST 250 HOURS OF OPERATION
(Operations to be carried out together with those prescribed at point"4.7.9 MAINTENANCE EVERY 250 HOURS OF OPERATION")

N.	PART	OPERATION	PAGE
a	Engine valves	Check clearance	188

4.7.9 MAINTENANCE EVERY 250 HOURS OF OPERATION

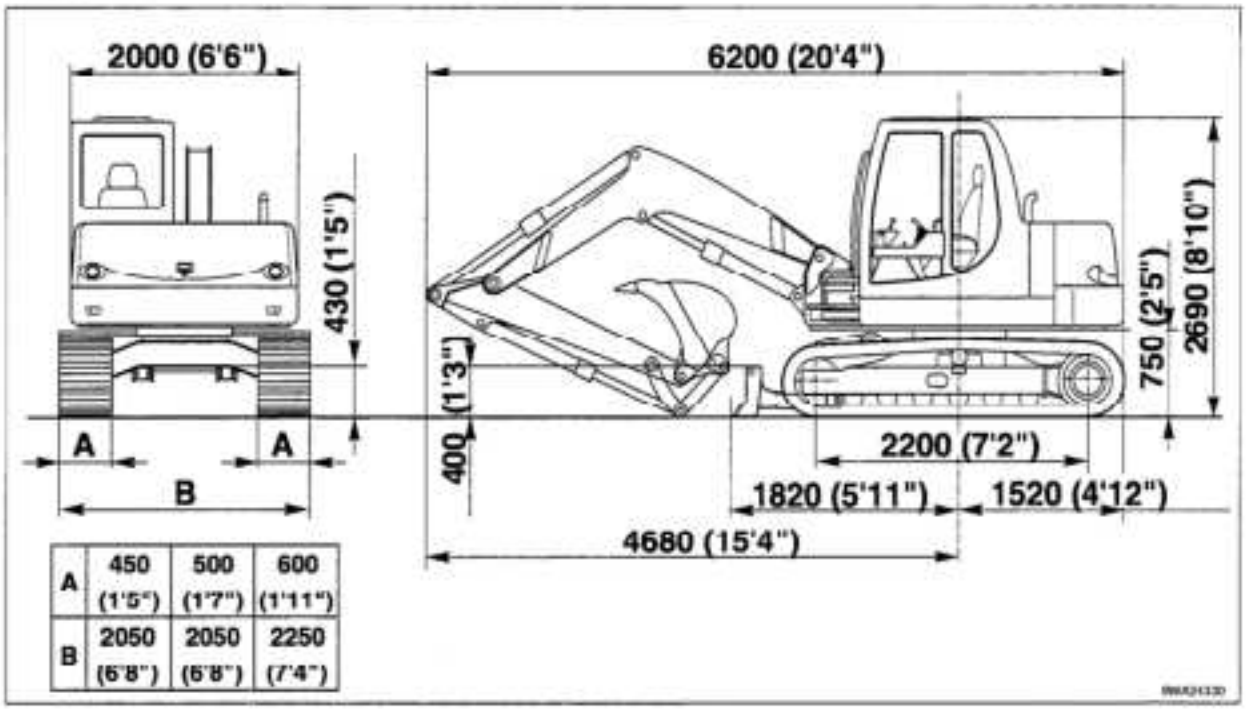
N.	PART	OPERATION	PAGE
a	Fan belt	Check fan belt condition and tension	177
b	Battery	Check electrolyte level	178
c	Travel reduction gears	Check levels (n. 2)	179
d	Swing reduction gear	Check level (n. 1)	179

MidWestTech | Komatsu PC75R-2 Hydraulic Excavator Operation & Maintenance Manual | P... Order the manual at mid-west-tech.com >

5.1 TECHNICAL DATA

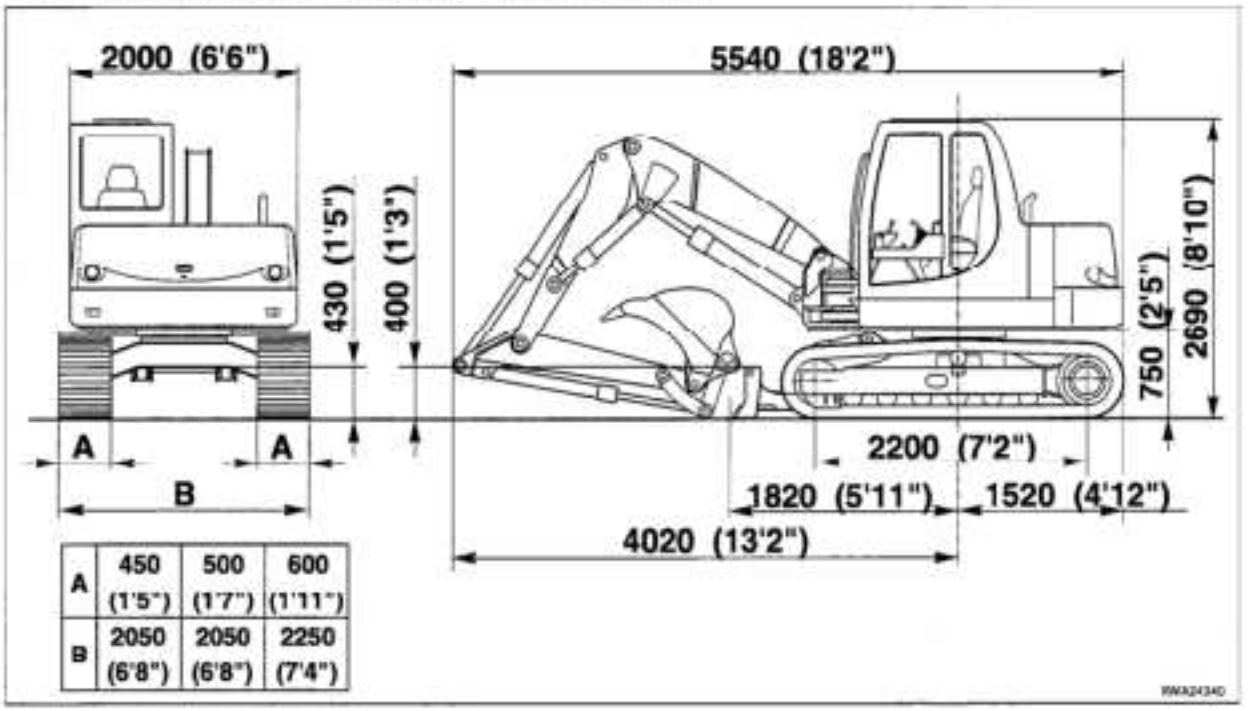
5.1.1 STANDARD OVERALL DIMENSIONS

OVERALL DIMENSIONS WITH MONOBOOM



A	450 (1'5")	500 (1'7")	600 (1'11")
B	2050 (6'8")	2050 (6'8")	2250 (7'4")

OVERALL DIMENSIONS WITH TWO-PIECE BOOM



A	450 (1'5")	500 (1'7")	600 (1'11")
B	2050 (6'8")	2050 (6'8")	2250 (7'4")

MidWestTech | Komatsu PC75R-2 Hydraulic Excavator Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >