TEN00134-03

Operation & Maintenance Manual

BULLDOZER

GALEO

D275AX-5E0

SERIAL NUMBERS 30001 and up

ecot3

WARNING

Unsafe use of this machine may cause serious injury or death. Operators and maintenance personnel must read this manual before operating or maintaining this machine. This manual should be kept near the machine for reference and periodically reviewed by all personnel who will come into contact with it.

NOTICE

Komatsu has Operation & Maintenance Manuals written in some other languages. If a foreign language manual is necessary, contact your local distributor for availability.

KOMATSU®

MidWestTech | Komatsu Galeo D275AX-5E0 Bulldozer Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

CONTENTS

FOREWORD 1- 1
FOREWORD 1- 2
SAFETY INFORMATION 1- 5
INTRODUCTION 1- 7
FRONT/REAR, LEFT/RIGHT DIRECTIONS OF MACHINE 1- 7
VISIBILITY FROM OPERATOR'S SEAT 1- 8
BREAKING IN THE MACHINE 1- 9
NECESSARY INFORMATION 1- 10
PRODUCT IDENTIFICATION NUMBER (PIN), MACHINE SERIAL NO. PLATE 1- 10
EPA REGULATIONS, ENGINE NUMBER PLATE 1- 10
BLADE SERIAL NO. PLATE POSITION 1- 11
RIPPER SERIAL NO. PLATE POSITION 1- 11
POSITION OF SERVICE METER 1- 11
TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR 1- 12
SAFETY 2- 1
SAFETY 2- 2
SAFETY LABELS 2- 4
POSITIONS OF SAFETY PICTOGRAMS 2- 4
SAFETY LABELS 2- 5
GENERAL PRECAUTIONS 2- 9
PRECAUTIONS FOR OPERATION 2- 18
BEFORE STARTING ENGINE 2- 18
OPERATION 2- 20
TRANSPORTATION 2- 24
BATTERY 2- 25
TOWING 2- 27
PRECAUTIONS FOR MAINTENANCE 2- 28
OPERATION 3- 1
GENERAL VIEW 3- 2
GENERAL VIEW OF MACHINE 3- 2
GENERAL VIEW OF CONTROLS AND GAUGES 3- 3
EXPLANATION OF COMPONENTS 3- 5
FRONT PANEL 3- 5
SWITCHES 3- 36
CONTROL LEVERS, PEDALS 3- 40
DUST INDICATOR 3- 50
POWER SOURCE 3- 50
FUSE BOX 3- 51
CAP WITH LOCK 3- 55
DOOR OPEN LOCK 3- 57
SASH GLASS INTERMEDIATE LOCK 3- 58
DOOR POCKET 3- 58
ASHTRAY 3- 58
TOOL BOX 3- 59
CAR STEREO, HANDLING 3- 60
AIR CONDITIONER, HANDLING 3- 68
OPERATION 3- 73
CHECK BEFORE STARTING ENGINE, ADJUST 3- 73
STARTING ENGINE 3- 95

MidWestTech | Komatsu Galeo D275AX-5E0 Bulldozer Operation & Maintenance Manu... Order the manual at mid-west-tech.com >

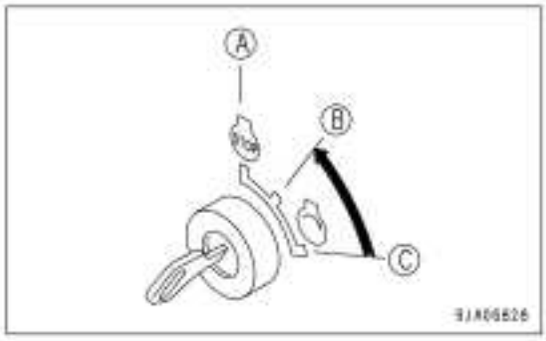
OPERATIONS AND CHECKS AFTER STARTING ENGINE ---- 3-100
STOPPING ENGINE ---- 3-103
MOVING MACHINE ---- 3-104
STOPPING MACHINE ---- 3-106
SHIFTING GEAR ---- 3-107
SHIFTING BETWEEN FORWARD AND REVERSE ---- 3-112
STEERING MACHINE ---- 3-114
PRECAUTIONS FOR OPERATION ---- 3-117
PARKING MACHINE ---- 3-119
CHECK AFTER STOPPING ENGINE ---- 3-120
CHECK AFTER FINISHING WORK ---- 3-121
LOCKING ---- 3-121
WORK POSSIBLE USING BULLDOZER ---- 3-122
EFFECTIVE USE OF MODE SELECTION SYSTEM ---- 3-124
RIPPER OPERATION ---- 3-129
OPERATING METHOD FOR RIPPING OPERATIONS ---- 3-132
ADJUSTING POSTURE OF WORK EQUIPMENT ---- 3-137
TIPS FOR LONGER UNDERCARRIAGE LIFE ---- 3-140
TRANSPORTATION ---- 3-142
TRANSPORTATION PROCEDURE ---- 3-142
LOADING, UNLOADING WORK ---- 3-142
METHOD OF LIFTING MACHINE ---- 3-145
TRAVELING ON ROADS ---- 3-146
REMOVAL OF CAB ---- 3-147
INSTALLATION OF CAB ---- 3-147
COLD WEATHER OPERATION ---- 3-148
PRECAUTIONS FOR LOW TEMPERATURE ---- 3-148
AFTER COMPLETION OF WORK ---- 3-150
AFTER COLD WEATHER ---- 3-150
LONG-TERM STORAGE ---- 3-151
BEFORE STORAGE ---- 3-151
DURING STORAGE ---- 3-151
AFTER STORAGE ---- 3-151
STARTING MACHINE AFTER LONG-TERM STORAGE ---- 3-151
TROUBLESHOOTING ---- 3-152
AFTER RUNNING OUT OF FUEL ---- 3-152
METHOD OF TOWING MACHINE ---- 3-153
IF BATTERY IS DISCHARGED ---- 3-154
OTHER TROUBLE ---- 3-158
WHEN MODE SELECTION SYSTEM FLASHES ---- 3-163
MAINTENANCE ---- 4- 1
GUIDES TO MAINTENANCE ---- 4- 2
OUTLINES OF SERVICE ---- 4- 5
HANDLING OIL, FUEL, COOLANT, AND PERFORMING OIL CLINIC ---- 4- 5
OUTLINE OF ELECTRIC SYSTEM ---- 4- 9
HANDLING HYDRAULIC RELATED EQUIPMENT ---- 4- 10
WEAR PARTS ---- 4- 11
WEAR PARTS LIST ---- 4- 11

MidWestTech | Komatsu Galeo D275AX-5E0 Bulldozer Operation & Maintenance Manu... Order the manual at mid-west-tech.com >

RECOMMENDED FUEL, COOLANT, AND LUBRICANT ---- 4- 12
RECOMMENDED BRANDS, RECOMMENDED QUALITY FOR PRODUCTS OTHER THAN KOMATSU GENUINE OIL ---- 4- 14
STANDARD TIGHTENING TORQUES FOR BOLTS AND NUTS ---- 4- 15
TORQUE LIST ---- 4- 15
PERIODIC REPLACEMENT OF SAFETY CRITICAL PARTS ---- 4- 16
SAFETY CRITICAL PARTS ---- 4- 16
MAINTENANCE SCHEDULE CHART ---- 4- 18
MAINTENANCE SCHEDULE CHART ---- 4- 18
SERVICE PROCEDURE ---- 4- 20
INITIAL 250 HOURS SERVICE (ONLY AFTER THE FIRST 250 HOURS) ---- 4- 20
WHEN REQUIRED ---- 4- 21
CHECK BEFORE STARTING ---- 4- 50
EVERY 250 HOURS SERVICE ---- 4- 51
EVERY 500 HOURS SERVICE ---- 4- 58
EVERY 1000 HOURS SERVICE ---- 4- 64
EVERY 2000 HOURS SERVICE ---- 4- 73
EVERY 4000 HOURS SERVICE ---- 4- 83
EVERY 8000 HOURS SERVICE ---- 4- 87
SPECIFICATIONS ---- 5- 1
SPECIFICATIONS ---- 5- 2
ATTACHMENTS, OPTIONS ---- 6- 1
GENERAL PRECAUTIONS ---- 6- 2
PRECAUTIONS RELATED TO SAFETY ---- 6- 2
SELECTION OF TRACK SHOE ---- 6- 3
SELECTION OF TRACK SHOES ---- 6- 3
PROCEDURE FOR SELECTING RIPPER POINT ---- 6- 4
EFFECTIVE METHOD OF OPERATION FOR DUAL TILT DOZER ---- 6- 5
BLADE CONDITION ---- 6- 5
DOZING WORK ---- 6- 7
LEVELING (SPREADING) OPERATION ---- 6- 10
DITCHING OPERATION ---- 6- 10
BOULDER RAISING OPERATION ---- 6- 10
SIDE-CUTTING OPERATIONS ---- 6- 11
HORIZONTAL DOZING OPERATIONS FROM SIDE SLOPE (ROUGH GROUND) ---- 6- 11
SHOE SLIP CONTROL ---- 6- 12
MODE SELECTION SWITCH PANEL (SHOE SLIP CONTROL) ---- 6- 12
EFFECTIVE USE OF MODE SELECTION SYSTEM ---- 6- 14
IF MODE SELECTION SYSTEM FLASHES ---- 6- 21
HANDLING MACHINES EQUIPPED WITH KOMTRAX ---- 6- 22
BASIC PRECAUTIONS ---- 6- 22
INDEX ---- 7- 1

MidWestTech | Komatsu Galeo D275AX-5E0 Bulldozer Operation & Maintenance Manu... Order the manual at mid-west-tech.com >

6. When the engine starts, release the key in starting switch (2). The key will return automatically to the ON position (B).



REMARK
Immediately after starting the engine, run at idle. While running the engine, release the decelerator pedal and do not operate the work equipment.
Guideline for idle time
- Cold weather: At least 15 seconds
- 1st start after changing engine oil or engine oil filter: 20 seconds

7. When the engine rotation stabilizes, return to the low idle (MIN) position of fuel control dial (1) and then carry out the warming-up operation.

REMARK
- Regardless of the ambient temperature, if the key in starting switch (2) is turned from OFF position to left, preheating pilot lamp (3) will light up and preheating will start. (Preheating continues while the starting switch is held at the left.)
  For the details of the preheating time, see the table in Step 5.
- While preheating is being carried out, the preheating pilot lamp (3) lights up to show that preheating is being carried out. After it lights up for 36 seconds, it flashes for 16 seconds and goes out. When it goes out, complete the preheating immediately.
- If the engine does not start with the above operation, wait for about 2 minutes, and repeat steps from Step 3. And 4.
- The relationship between the actuation time of the turbo protect function and the engine cooling water temperature is as follows.
  Even if the fuel control dial is operated within the time given below, the engine speed will not change.

Coolant temperature	Turbo protect time (sec.)
Above 10°C (50°F)	0
10 to -10°C (50 to 14°F)	Change 0 to 20
below -10°C (14°F)	20

- In cold weather, the turbo protect function is actuated, so the engine speed is kept at 1000 rpm or below for several seconds. After that, it becomes the speed set by the position of the fuel control dial.

MidWestTech | Komatsu Galeo D275AX-5E0 Bulldozer Operation & Maintenance Manu... Order the manual at mid-west-tech.com >

SERVICE PROCEDURE

INITIAL 250 HOURS SERVICE (ONLY AFTER THE FIRST 250 HOURS)

Perform the following maintenance only after the first 250 hours.

- Replase power train oil filter element, steering lubricating oil filter element
- Change oil in power train case, wash strainers (power train pump strainer, scavenging pump strainer)
- Replace charge filter element
- Change oil in hydraulic tank, replace hydraulic oil filter element, clean hydraulic tank strainer
- Change oil in final drive case

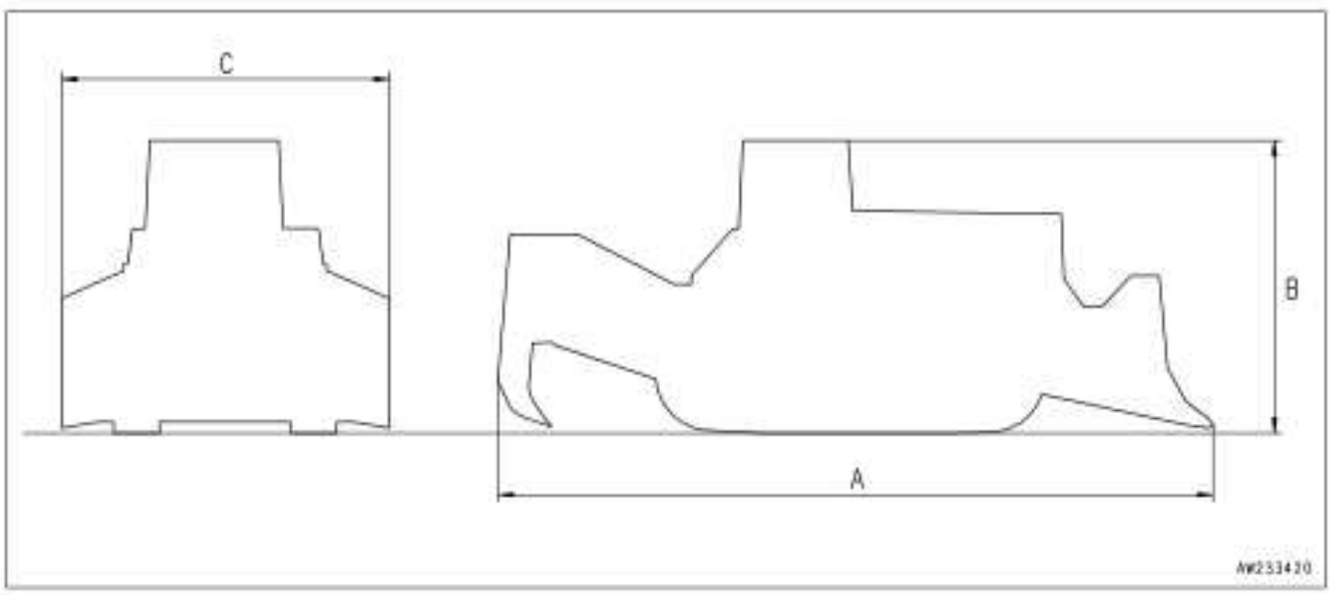
For details of the method of replacing or maintaining, see the section on EVERY 500 HOURS, 1000 HOURS and 2000 HOURS SERVICE.

MidWestTech | Komatsu Galeo D275AX-5E0 Bulldozer Operation & Maintenance Manu... Order the manual at mid-west-tech.com >

SPECIFICATIONS

	Item		Unit	D275AX-5E0	
				Semi-U tilt dozer	U tilt dozer
	Operating weight (without operator)		kg (lb)	50,980(112.411)(*1)	51,005(112.466)(*2)
	Blade unit weight (including cylinder)		kg (lb)	6,750 (14,884)	7,676 (16,926)
	Ripper unit weight		kg (lb)	4,462 (9,839) (Multi-hank ripper)	3,600 (7,938) (Giant ripper)
	Name of engine		-	KOMATSU SAA6D140E-5 diesel engine	
	Engine horsepower		kW(HP)/rpm	336(451)/2,000	
A	Overall length		mm (ft in)	8,905 (29'3")	9,595 (31'6")
B	Overall hight		mm (ft in)	3,985 (13'1")	
C	Overall width		mm (ft in)	4,300 (14'1")	
	Travel speed (1st/2nd/3rd)	Forward	km/h (MPH)	3.8/6.7/11.2 (2.4/4.2/7.0)	
		Reverse	km/h (MPH)	4.9/8.7/14.9 (3.0/5.4/9.3)	

*1: Semi-U tilt dozer, multi-shank ripper, ROPS cab, air conditioner
*2: U tilt dozer, Giant ripper, ROPS cab, air conditioner



MidWestTech | Komatsu Galeo D275AX-5E0 Bulldozer Operation & Maintenance Manu... Order the manual at mid-west-tech.com >