

# Shop Manual

# 830E

## DUMP TRUCK

SERIAL SUFFIX

**AFE32-DJ - AFE32-DM  
AFE32-DS & UP**

**KOMATSU®**



# FOREWORD

This Service Manual is written for use by the service technician and is designed to help the technician become fully knowledgeable of the truck and all its systems in order to keep it running and in production. All maintenance personnel should read and understand the materials in this manual before performing maintenance and/or operational checks on the truck. All safety notices, warnings and cautions should be understood and followed when accomplishing repairs on the truck.

The first section covers component descriptions, truck specifications and safe work practices, as well as other general information. The major portion of the manual pertains to disassembly, service and reassembly. Each major serviceable area is dealt with individually. For example: The disassembly, service and reassembly of the radiator group is discussed as a unit. The same is true of the engine and engine accessories, and so on through the entire mechanical detail of the truck. Disassembly should be carried only as far as necessary to accomplish needed repairs.

The illustrations used in this manual are, at times, typical of the component shown and may not necessarily depict a specific model.

This manual shows dimensioning of U.S. standard and metric (SI) units throughout and all references to "Right", "Left", "Front", or "Rear" are made with respect to the operator's normal seated position, unless specifically stated otherwise.

Standard torque requirements are shown in torque charts in the general information section and individual torques are provided in the text in bold face type, such as **100 ft.lbs. (135 N.m)** torque. All torque specifications have  $\pm 10\%$  tolerance unless otherwise specified.

A Product Identification plate is normally located on the truck frame in front of the right side front wheel and designates the Truck Model Number, Product Identification Number (vehicle serial number), and Maximum G.V.W. (Gross Vehicle Weight) rating.

The HAULPAK<sup>®</sup> Model designation consists of three numbers and one letter (i.e. 830E). The three numbers represent the basic truck model. The letter "M" designates a Mechanical drive and the letter "E" designates an Electrical propulsion system.

The Product Identification Number (vehicle serial number) contains information which will identify the original manufacturing bill of material for this unit. This complete number will be necessary for proper ordering of many service parts and/or warranty consideration.

The Gross Vehicle Weight (GVW) is what determines the load on the drive train, frame, tires, and other components. The vehicle design and application guidelines are sensitive to the **total maximum Gross Vehicle Weight (GVW)** and this **means the total weight**: the Empty Vehicle Weight + the fuel & lubricants + the payload.

**To determine allowable payload:**

Service all lubricants for proper level and fill fuel tank of empty truck (which includes all accessories, body liners, tailgates, etc.) and then weigh truck.

Record this value and subtract from the GVW rating. The result is the allowable payload.

*NOTE: Accumulations of mud, frozen material, etc. become a part of the GVW and reduces allowable payload. To maximize payload and to keep from exceeding the GVW rating, these accumulations should be removed as often as practical.*

**Exceeding the allowable payload will reduce expected life of truck components.**



*This "ALERT" symbol is used with the signal words, 'CAUTION', 'DANGER', and 'WARNING' in this manual to alert the reader to hazards arising from improper operating and maintenance practices.*



*'DANGER' identifies a specific potential hazard  
WHICH WILL RESULT  
in either INJURY OR DEATH  
if proper precautions are not taken.*



*'WARNING' identifies a specific potential hazard  
WHICH MAY RESULT  
in either INJURY OR DEATH  
if proper precautions are not taken.*



*'CAUTION' is used for general reminders  
of proper safety practices  
OR  
to direct the reader's attention to avoid unsafe  
or improper practices which may result  
in damage to the equipment.*

# TABLE OF CONTENTS

<b>SUBJECT</b> . . . . .	<b>SECTION</b>
GENERAL INFORMATION . . . . .	A
STRUCTURES . . . . .	B
ENGINE, FUEL, COOLING AND AIR CLEANER . . . . .	C
ELECTRIC SYSTEM (24 VDC. NON-PROPULSION) . . . . .	D
ELECTRIC PROPULSION AND CONTROL . . . . .	E
DRIVE AXLE, SPINDLES AND WHEELS . . . . .	G
HYDRAIR <sup>®</sup> II SUSPENSIONS . . . . .	H
BRAKE CIRCUIT . . . . .	J
AIR SYSTEM . . . . .	K
HYDRAULIC SYSTEM . . . . .	L
OPTIONS AND SPECIAL TOOLS . . . . .	M
OPERATOR'S CAB . . . . .	N
LUBRICATION AND SERVICE . . . . .	P
ALPHABETICAL INDEX . . . . .	Q
SYSTEM SCHEMATICS . . . . .	R

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