

TECHNICAL MANUAL

ORGANIZATIONAL, DIRECT SUPPORT, AND

GENERAL SUPPORT MAINTENANCE MANUAL

(INCLUDING REPAIR PARTS AND

SPECIAL TOOL LIST)

FOR

85' AERIAL LADDER

FIRE FIGHTING TRUCK

NSN 4210-00-965-1254

HEADQUARTERS, DEPARTMENT OF THE ARMY

20 FEBRUARY 1987

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FOREWORD

Descriptions, instructions and parts listing pertaining to the Model QWT 85 are discussed throughout this manual under the general headings Chassis, Pump and Ladder. Foldout illustrations and schematics, other than those forming a part of a commercial manual are located at the end of this publication. The foldout format is provided in order that illustrations and schematics may be continuously refer-red to while the supporting text is examined and studied.

A detailed description is given in the Introduction of each Part of the manual to assist the user in finding the information required to main the equipment.

- **Operator's Manual (TM 5-4210-227-10)**

This manual is designed to provide the information necessary for a fire fighter or mechanic to properly operate the truck, the pump and the ladder.

- **Maintenance Manual (TM 5-4210-227-24&P)**

This manual contains the information necessary for an experienced mechanic to maintain and repair all facets of the apparatus. This manual also contains all the information necessary to obtain assemblies and subassemblies. or individual parts, required to repair and maintain the fire truck.

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MAINTENANCE MANUAL

SECTION 1

1. INTRODUCTION/TABULATED DATA

1.1. INTRODUCTION

1.1.1. TM 5-4210-227-24&P, Organizational, Direct Support, and General Support Maintenance Manual for the 85' Aerial Ladder Fire Fighting Truck is divided into eight volumes. These eight volumes are further subdivided into specific sections consisting of both Government and commercial literature. TM 5-4210-227-10, Operator's Manual for the 85' Aerial Ladder Fire Fighting Truck is one separate manual consisting of four separate sections.

1.1.2. This volume consists of nine sections and is arranged as follows:

1. Introduction/Tabulated Data
2. Chassis Assembly
3. Pump Assembly
4. Ladder Assembly
5. Hydraulic System
6. Electrical System
7. Pneumatic System
8. Ladder Calibration and Adjustments
9. Illustrations

1.2 TABULATED DATA

- a) Fire Truck
Federal Stock Number: 4210-00-965-1254
Manufacturer's Serial No.:
Registration Nos.: CM3653 through CM3664
Manufacturer: Pierre Thibault Inc.
Model: QWT 85
Contract Number: DAAJ10-84-A218
Truck Length: 459"
Truck Width: 108"
Truck Height: 138"
Capacity or Payload: 51,000 GVWR
Shipping Weight: 43,880
Ground Clearance: 10.25"
Weight Loaded: 45,940
Front Axle 19,740
Rear Axle 26,200
- b) Chassis
Manufacturer: Duplex
I.D. Number: I.C. ID91 D31
D6F 1008468
Model: D350
Wheel Base: 230"
- c) Engine
Manufacturer: Detroit Diesel
Model: 8V-71 Turbo
Serial Number: 8VA437868
Fuel: Diesel

- d) Transmission
Manufacturer: Allison
Model: HT-740
Serial No.: 2510087501
Capacity: 7 1/2 Gals
- e) Firefighting Water Pump
Manufacturer: Hale
Model: QSM FHD100
Capacity: 1000 GPM @ 150 psi
- f) Front Axle
Manufacturer: Rockwell International
Model: FL 941 QX-70
Capacity: 20,000 lbs.
Serial No.: N766718
- f) 1. Front Shock Absorbers
Manufacturer: Duplex
Model: 7605-1258
- f) 2. Front Springs
Manufacturer: Duplex
Model: 7804-6731
- g) Rear Axle
Manufacturer: Rockwell International
Model: U-170 PX-99
Capacity: 31,000 lbs.
Serial No.: NW8454892
- g) 1. Rear Suspension
Manufacturer: Hendrickson
Model: Single Axle RS-SA-340