#### WAR DEPARTMENT

# **TECHNICAL MANUAL**



7-TON SEMITRAILER, PANEL CARGO (EDWARDS, GRAMM, AND NABORS)

JUNE 11, 1943

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TECHNICAL MANUAL }

WAR DEPARTMENT Washington, June 11, 1943

# 7-TON SEMITRAILER, PANEL CARGO

(EDWARDS, GRAMM, AND NABORS)

Prepared under the direction of the Chief of Ordnance

(with the cooperation of Edwards Iron Works, Inc., Gramm Truck & Trailer Corp., and W. C. Nabors Company)

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### PART I—OPERATING INSTRUCTIONS

#### Section I

## INTRODUCTION

Paragraph

Scope

1

#### 1. SCOPE.

- a. This manual is published for the information and guidance of the using arms personnel charged with the operation and maintenance of this materiel.
- **b.** In addition to a description of the 7-ton Semitrailer, Panel Cargo, this manual contains technical information required for the identification, use and care of the materiel. The manual is divided into two parts:
- (1) Part I, containing sections I through VII, is for the information and guidance of the operating personnel of the using arm. It contains a description of controls and equipment, operating instructions, driver preventive maintenance, and lubrication instructions.
- (2) Part II, containing sections VIII through XX, is for the using arm charged with the responsibility of doing maintenance work within their jurisdiction. These sections contain descriptions of major units, trouble shooting, and instructions for making minor adjustments, repairs or unit replacement.
- c. In all cases where the nature of the repair, moc.fication, or adjustment is beyond the scope or facilities of the unit, the responsible ordnance service should be informed so that trained personnel with suitable tools and equipment may be provided, or proper instructions issued.

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#### 7-TON SEMITRAILER, PANEL CARGO

#### Section II

## DESCRIPTION AND TABULATED DATA

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#### 2. **DESCRIPTION** (figs. 1, 2, 3, and 4).

- a. General. The 7-ton semitrailer, panel cargo (2DT) is a two-wheel utility vehicle having dual tires. A spare wheel and tire is carried on a bracket attached to the front of the body. A retracting-type landing gear is attached to the frame, and is operated by a worm screw and hand crank, which is located on the right center side. Auxiliary supports are attached to both sides of the frame forward. The body, which is mounted on a steel frame, is of the open-top panel type, with a maximum payload of 14,000 pounds. The frame is carried on a one-piece axle through a slip-end, semi-elliptical spring suspension. Two combination blackout tail and stop lights are installed on the rear.
- b. Braking. The braking for the trailer is done by means of internal expanding, vacuum-operated power brakes, located on each of the inner dual wheels. The brakes are controlled through the tractor-trailer brake linkage system by an operating valve located on the tractor and operated by the driver through foot pedal or hand brake.
- c. Towing. The semitrailer is towed by a tractor-truck equipped with a fifth wheel coupling. The upper fifth wheel for this coupling, consisting of a plate and kingpin, is attached to the front end of the trailer.

#### 3. DIFFERENCES AMONG MODELS.

a. Semitrailer models D-11-B, SC-600, and 2-GC have the same outward appearance. Semitrailer models D-11-B and SC-600 have tubular axles, while model 2-GC has a solid, rectangular axle. The only other differences are in the manufacture of working parts, and do not affect the methods of maintenance by the using arms.

#### 4. DATA.

#### a. Physical Characteristics.

Weight, empty (approximately)	5,530	) 1b
Maximum payload		
Height of bed, empty	511/2	in.
Height of bed, loaded		
Length, over-all (not including spare tire)	. 198	in.

## DESCRIPTION AND TABULATED DATA

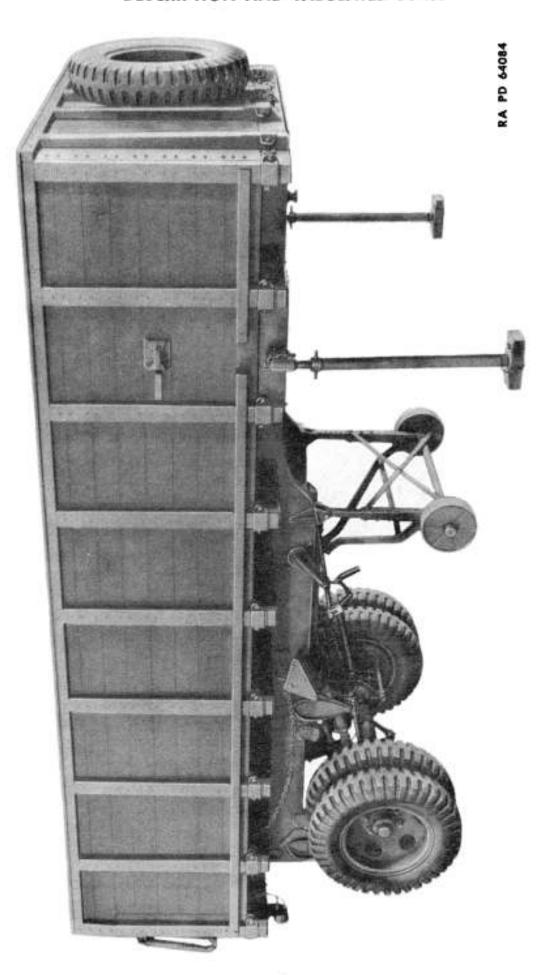


Figure 1—7-Ton Semitrailer, Panel Cargo—Right Side

# 7-TON SEMITRAILER, PANEL CARGO

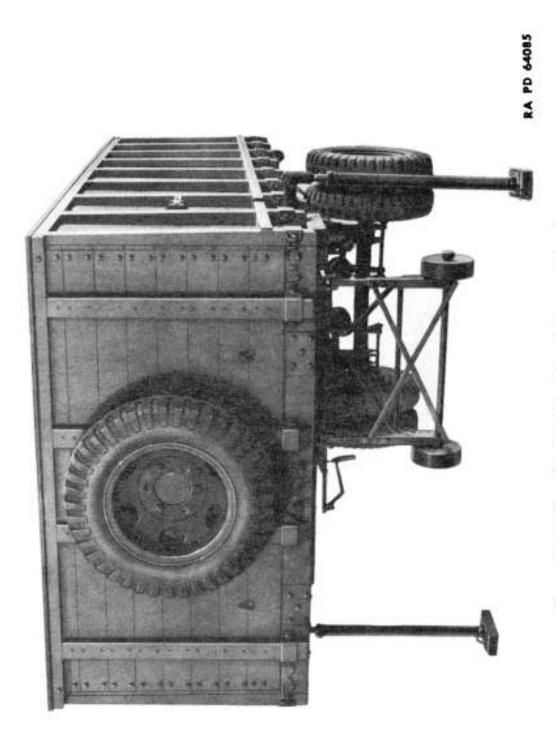


Figure 2—7-Ton Semitrailer, Panel Cargo—Front

# DESCRIPTION AND TABULATED DATA

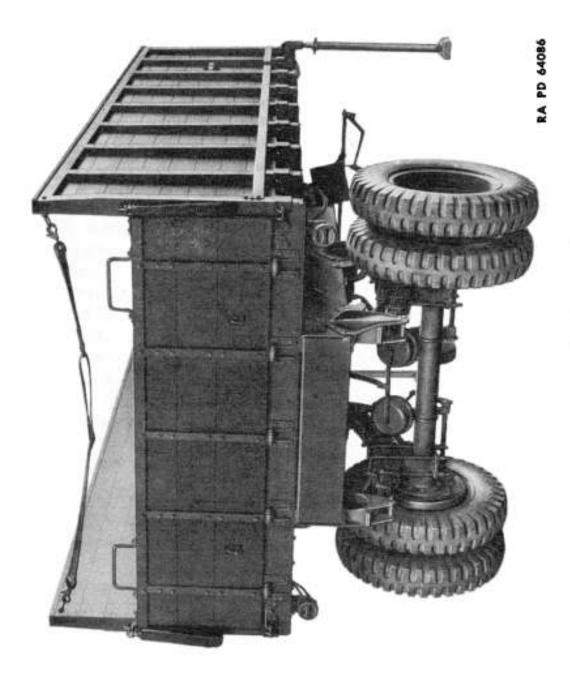


Figure 3—7-Ton Semitrailer, Panel Cargo—Rear

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# 7-TON SEMITRAILER, PANEL CARGO

Width, over-all	
Height, over-all	94 in.
Ground clearance	
Wheel tread	663/4 in.
Maximum towing speed	45 mph
b. Tires.	
Number	
Size	
Type	Regular
Number of plies	
Air pressure carried	
c. Brakes.	
TypeInternal-expa	nding (Duo Servo)
Diameter	_ ,
Width	