

TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
GENERAL SUPPORT AND DEPOT MAINTENANCE MANUAL WITH
CONSOLIDATED REPAIR PARTS AND SPECIAL TOOLS LISTS

FOR
V-398/MSA SEMITRAILER LOW BED

Note:

Part II is provided for use with the Technical Manual covering the mobile operations and electrical facility AN/MSA-34 (TM 32-9999-200-15). This part provides information covering serial number 15 and higher V-398 semitrailers.

HEADQUARTERS, DEPARTMENT OF THE ARMY
FEBRUARY 1973

TECHNICAL MANUAL

NO. 32-9999-200-15-2

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 28 February 1973

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CHAPTER 1
INTRODUCTION

Section I. GENERAL

1-1. Scope.

Part II of this manual is for your use in operating and maintaining the V-398 special purpose, low bed semitrailer (serial No. 15 and higher). This part is intended for use with the Part 1 of the technical manual covering the Mobile Operation and Electrical Facility AN/MSA-34.

1-2. Maintenance Forms and Records.

Maintenance forms and records that you are required to use are explained in TM 38-750.

1-3. Reporting of Errors.

You can improve this manual by calling attention to errors and by recommending improvements, using DA Form 2028 (Recommended Changes to Publications), or by a letter mailed directly to: Commanding Officer, USASA Materiel Support Command, ATTN: IAMNMP/MD, Vint Hill Farms Station, Warrenton, Virginia 22186.

1-4. Equipment Serviceability Criteria (ESC).

This equipment is not covered by an ESC.

1-5. Destruction of Army Material to Prevent Enemy Use.

Refer to TM 32-9999-200-15 for instructions covering destruction of the semitrailer to prevent enemy use.

1-6. Administrative Storage.

Administrative storage of the semitrailer and its components shall be performed in accordance with the applicable requirements of TM 740-90-1.

Section II. DESCRIPTION AND DATA

1-7. Description.

a. General. The V398 Low Bed Semitrailer (see figure 1 of Appendix C) is a specially configured vehicle intended primarily for use as part of a Mobile Operations and Electrical Facility AN/MSA-34. The semitrailer is designed to provide system mobility and to serve as a stable platform for an operational system. The semitrailer has all equipment required for "over the road" usage and also is equipped with special handling features for aircraft transport, (Refer to TM 32-9999-200-15 for description of an AN/MSA-34).

b. Frame. The semitrailer consists of a welded steel frame with reinforced gooseneck. Cross members along the frame support to the shelters, and cross members in the gooseneck support the generator and air conditioners. Six stanchions are located down each side of the frame, with tiedown eye fittings adjacent to them. These are used for shelter tiedown. In addition, the stanchions serve as anchor points for aircraft tiedown fittings.

c. Running Gear. The running gear (see figure 20 of Appendix C) is located under the rear section of the frame. The running gear consists of equalizing type spring assemblies, axles, hubs, wheels, and tube type tires. The entire running gear can be raised to lower the overall height of the semitrailer for loading in confined height aircraft. The running gear is equipped with service and parking brakes. The running gear is mounted on two independent axle sets consisting of three axles per set.

d. Service Brakes. The service brake system (see figure 15 of Appendix C) is a symmetrical, dual, air over hydraulic system, with the system being controlled by the towing vehicle. The service brake system consists of "service" and "emergency" air line couplers on the forward end of the gooseneck, with air lines to "tee" fittings where the system is split into a dual system. From the "tee" fittings, lines are connected to two relay emergency valves, two air reservoirs and two power clusters. The power cluster forms the interface between the air and hydraulic portions of the system. From the power cluster to the wheel cylinders, the two systems are completely independent of each other. A failure in one side of the system will not result in total loss of braking. The roadside hydraulic system controls the braking for all wheels on the forward axles and the inboard wheels on the center axles. The curbside hydraulic system controls the braking for all wheels on the rear axles and the outboard wheels on the center axles. Two flexible air lines are provided with the semitrailer for hook up of the system to the towing vehicle. Dummy couplers, with storage brackets, are provided for excluding dirt from the air line couplers when the towing vehicle is not hooked up.

e. Parking Brakes. Parking brakes are provided for all outboard wheels on the semitrailer. The brakes are actuated, through cables, by hand-brake levers located on either side of the semitrailer, forward of the running gear.