

TECHNICAL MANUAL

TRANSPORTABILITY GUIDANCE

GRADER, ROAD, MOTORIZED, DIESEL-ENGINE-DRIVEN (DED)

HEAVY, COMMERCIAL CONSTRUCTION EQUIPMENT (CCE)

MODEL 130G MIL

NSN 3805-01-150-4795

MODEL 130G TYPE I (NONSECTIONALIZED)

NSN 3805-01-126-7894

MODEL 130G TYPE II (SECTIONALIZED)

NSN 3805-01-126-7895

HEADQUARTERS, DEPARTMENT OF THE ARMY

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CHAPTER 1

INTRODUCTION

1-1. Purpose and Scope

a. This manual provides transportability guidance for logistical handling and movement of the grader, road, motorized, diesel-engine-driven (DED) in the following configurations.

(1) Grader, road, motorized, DED, heavy, commercial construction equipment (CCE).

(2) Grader, road, motorized, DED, nonsectionalized, Type I.

(3) Grader, road, motorized, DED, sectionalized, Type II.

b. This manual contains information considered appropriate for safe transport of these items. Included are significant technical and physical characteristics with safety considerations required for worldwide movement by the various transportation modes. Where considered necessary, metric equivalents are given in parentheses following the dimension or other measurement.

c. This manual is intended for transportation officers and other personnel responsible for providing transportation services.

1-2. Safety

Appropriate precautionary measures required during movement of the items are contained in chapter 3.

1-3. Definitions of Warnings, Cautions, and Notes

Throughout this manual, warnings, cautions, and notes emphasize important or critical guidance. They are used for the following conditions:

a. *Warning.* Instructions that, if not followed, could result in injury to or death of personnel.

b. *Caution.* Instructions that, if not strictly observed, could result in damage to or destruction of equipment.

c. *Note.* A brief statement for use as necessary to emphasize a particular operating procedure or condition.

1-4. Reporting of Recommendations and Comments

Individual users of this manual are encouraged to recommend changes and submit comments for its improvement. Comments should be prepared on DA Form 2028 (Recommended Changes to DA Publications and Blank Forms) and forwarded to Commander, Military Traffic Management Command Transportation Engineering Agency, ATTN: MTT-TRC, PO Box 6276, Newport News, VA 23606-0276. Electrically transmitted messages should be addressed to CDR MTMC TEA FT EUSTIS VA//IMTT-TRC//. A reply will be furnished by this command.

CHAPTER 2

TRANSPORTABILITY DATA

Section I. GENERAL

2-1. Scope

This chapter provides a general description and identification photographs of the three configurations of the Caterpillar model 130G graders. Transportability characteristics of the grader are also provided.

2-2. Description

a. The Caterpillar model 130G graders are diesel engine-driven, four-wheel-drive, with six pneumatic tires and front-wheel, articulated-frame steering. Each grader is equipped with a blade and scarifier.

b. The model 130G MIL grader (fig 2-1) is the standard production Caterpillar. This grader is equipped with a sound-suppressed cab that meets OSHA standards. The letters MIL, which are given after the model number on the data plate, indicates that the cab or roll-over-protection system (ROPS) is removable and that tiedowns, lift points, and forward positioned hydraulic-lift cylinder auxiliary trunions are added for transportability purposes.

c. The model 130G Type I grader (fig 2-2) is modified for nonsectionalized requirements. This grader has an open ROPS and eight 20,000-pound tiedowns on each side for rigging on a 24-foot pallet for the low altitude parachute extraction system (LAPES). Although the Type I grader cannot be sectionalized for external sling loading, it has four lift eyes.

d. The model 130G Type II (sectionalized) grader (fig 2-3) has the same modifications as the Type I grader. Also, the Type II grader can be sectionalized into two halves for airmobile operations. Each half can be externally lifted by the CH-47 or larger helicopter. After both halves have been lifted, the rear half can be driven for a short distance from a ground position to rejoin the front half.

2-3. Transportability Drawings

Detailed transportability elevations of the model 130G grader with dimensions and tiedown and lift provisions are shown in figures 2-4 through 2-8.

Section II. CHARACTERISTICS AND RELATED DATA

2-4. General Transportability Characteristics

These data are applicable to model number or national stock number (NSN) shown. Changes in model or NSN may affect the loadability of the item related to guidance shown in this manual.

a. Grader, Road, DED, Heavy, CCE, Model 130G MIL

Line item number	G-74783
National stock number	3805-01-150-4795
Performance:	
Maximum speed	24.5 mph (40.8 km/h)
Fuel tank capacity	75 gal (284 liters)
Turning radius	24 ft (7.32 m)
Ground clearance.....	13.8 in. (0.35 m)
Dimensions and weight:	
Weight, operational	31,300 lb (14 197.44 kg)
Front axle, operational	9,680 lb (4 390.75 kg)
Rear tandem axle, operational	21,620 lb (9 806.62 kg)
Weight, reduced	29,450 lb (13 358.23 kg)
Front axle, reduced	9,470 lb (4 295.50 kg)
Rear tandem axle, reduced	19,980 lb (9 062.73 kg)
Length, operational.....	327 in. (8.31 m)
Length, reduced	327 in. (8.31 m)
Width, operational	95.5 in. (2.43 m)
Width, reduced	95.5 in. (2.43 m)
Height, operational	127 in. (3.23 m)

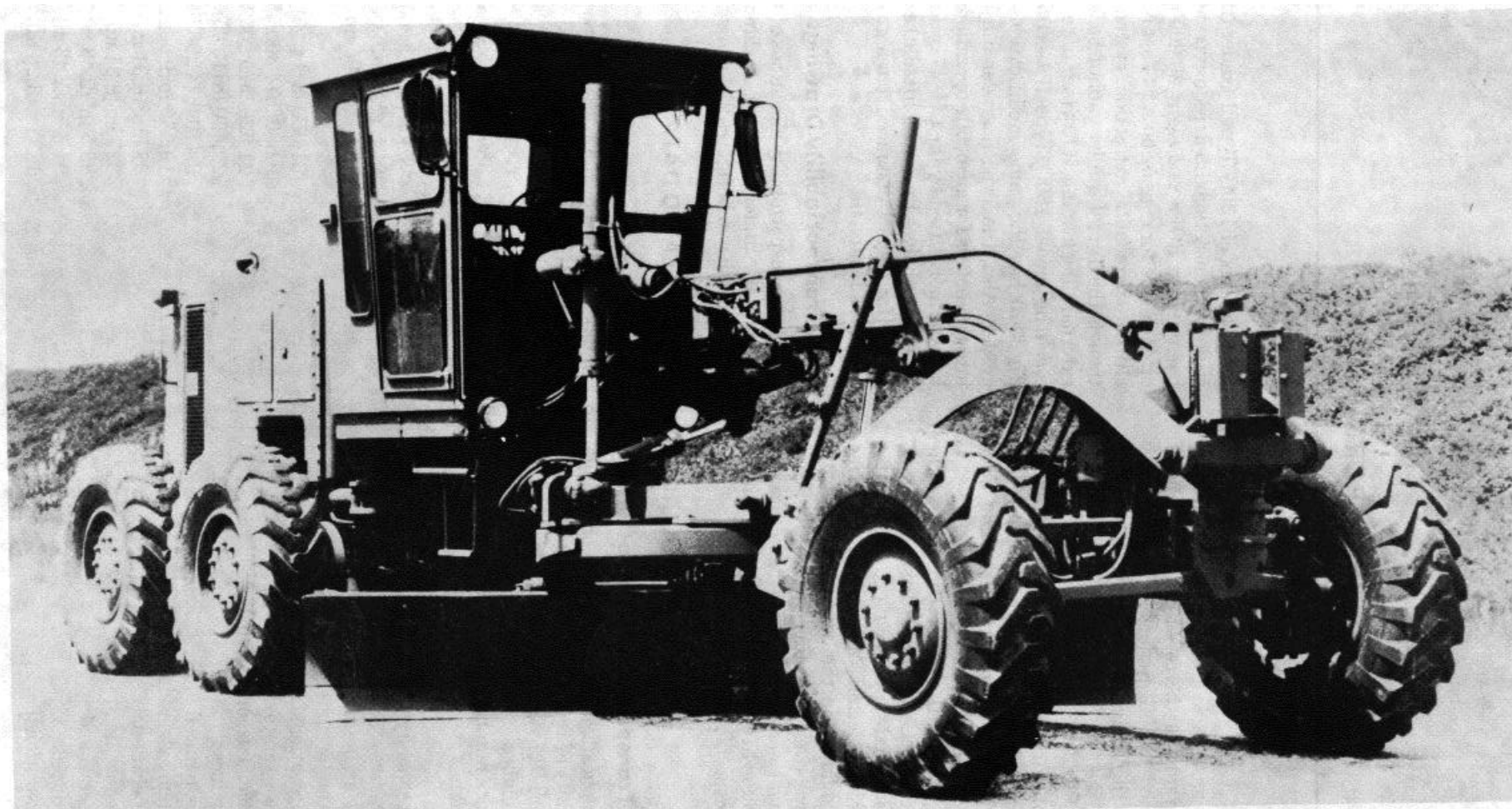


Figure 2-1. Model 130G MIL grader.