

**TECHNICAL MANUAL**

**TRANSPORTABILITY GUIDANCE**

**(TRUCKS, 5-TON, 6X6, M809-SERIES)**

**TRUCK, CARGO, WWN, M813 (FSN 2320-050-8890),  
WOWN (FSN 2320-050-8902)**

**TRUCK, CARGO, DROPSIDE, WWN, M813A1 (FSN  
2320-050-8905), WOWN (FSN 232-050-8918)**

**TRUCK, CARGO, WWN, M814 (FSN 2320-050-8987),  
WOWN (FSN 2320-050-8988)**

**TRUCK, LOGGING, BOLSTER, WWN, M815 (FSN 2320-050-8927)**

**TRUCK, WRECKER, MEDIUM, WWN, M816 (FSN 2320-051-0489)**

**TRUCK, DUMP, WWN, M817 (FSN 2320-051-0589),  
WOWN (FSN 2320-050-8970)**

**TRUCK, TRACTOR, WWN, M818 (FSN 2320-050-8978),  
WOWN (FSN 2320-050-8984)**

**TRUCK, TRACTOR, WRECKER, WWN, M819 (FSN 2320-050-9004)**

**TRUCK, VAN, EXPANSIBLE, WOWN, M820 (FSN 2320-050-9006)**

**TRUCK, VAN, EXPANSIBLE, WOWN, M820A2 (FSN 2320-050-9010)**

**TRUCK, STAKE, BRIDGE, TRANSPORTING, WWN, M821 (FSN 2320-050-9015)**

**HEADQUARTERS, DEPARTMENT OF THE ARMY**

**AUGUST 1974**

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DEPARTMENT OF THE ARMY  
Washington, DC, 17 July 1986

**Transportability Guidance**  
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**TRUCK, STAKE, BRIDGE, TRANSPORTING, WVN, M821 (FSN 2320-050-9015)**

TM 55-2320-260-15-1, 23 August 1974, is changed as follows:

1. New or changed material is indicated by a bar in the margin. Remove old pages and insert new pages as indicated below.

<i>Remove pages</i>	<i>Insert pages</i>
4-3 through 4-12 . . . . .	4-3 through 4-12
6-1 through 6-8 . . . . .	6-1 through 6-8 (blank)
7-1 through 7-7 . . . . .	7-1 through 7-6
A-1 through A-2 . . . . .	A-1 through A-2

2. File this change sheet in the front of the publication for reference purposes.

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TRUCK, STAKE, BRIDGE, TRANSPORTING, WWN, M821 (FSN 232-050-9015)**

	Paragraph	Page
CHAPTER 1 . INTRODUCTION		
Purpose and scope--	1-1	1-1
Reporting of recommendations and comments	1-2	1-1
Safety-	1-3	1-1
Definitions of warnings, cautions, and notes	1-4	1-1
2. TRANSPORTABILITY DATA		
Section I. GENERAL		
Scope-	2-1	2-1
Description-	2-2	2-1
II. CHARACTERISTICS AND RELATED DATA OF ITEMS		
General -	2-3	2-3
Side- and end-elevation drawings-	2-4	2-3
Reduced configuration	2-5	2-29
CHAPTER 3 . SAFETY		
General	3-1	3-1
Specific safety requirements	3-2	3-1
4. AIR TRANSPORTABILITY GUIDANCE		
Section I. GENERAL		
Scope-	4-1	4-1
Maximum utilization of aircraft	4-2	4-1
Safety-	4-3	4-1
II. TRANSPORT BY US ARMY AIRCRAFT		
Fixed wing aircraft	4-4	4-1
Helicopters	4-5	4-1
III. TRANSPORT BY US AIR FORCE AIRCRAFT		
Aircraft capabilities-	4-6	4-1
Typical loads	4-7	4-2
Responsibility-	4-8	4-2

	Paragraph	Page
CHAPTER 5. OFF-ROAD AND HIGHWAY TRANSPORTABILITY GUIDANCE		
Section I. GENERAL		
Scope-	5-1	5-1
Safety-	5-2	5-1
II. MOVEMENT ON OWN WHEELS		
General-	5-3	5-1
Preparation of trucks	5-4	5-1
III. TRANSPORT BY SEMITRAILER		
General	5-5	5-1
Loading on flatbed semitrailers	5-6	5-1
CHAPTER 6. MARINE AND TERMINAL TRANSPORTABILITY GUIDANCE		
Scope	6-1	6-1
Safety-	6-2	6-1
General-	6-3	6-1
7. RAIL TRANSPORTABILITY GUIDANCE		
Section I. GENERAL		
Scope-	7-1	7-1
Maximum utilization of railcars	7-2	7-1
II. TRANSPORT ON CONUS RAILWAYS		
General-	7-3	7-1
Preparation of vehicles-	7-4	7-1
Loading M809-series trucks on general-purpose flatcars-	7-5	7-1
III. TRANSPORT ON FOREIGN RAILWAYS		
General-	7-6	7-6
Transport on US Army-owned foreign service flatcars	7-7	7-7
APPENDIX. REFERENCES-		A-1

### LIST OF ILLUSTRATIONS

Figure number	Title	Page
2-1	Truck, cargo, 5-ton, 6x6, M813	2-1
2-2	Truck, cargo, dropside, 5-ton, 6x6, M813A1	2-1
2-3	Truck, cargo, 5-ton, 6x6, M814	2-1
2-4	Truck, logging, bolster, 5-ton, 6x6, M815-	2-2
2-5	Truck, wrecker, medium, 5-ton, 6x6, M816	2-2
2-6	Truck, dump, 5-ton, 6x6, M817-	2-2
2-7	Truck, tractor, 5-ton, 6x6, M818-	2-2
2-8	Truck, tractor, wrecker, 5-ton, 6x6, M819	2-2
2-9	Truck, van, expansible, 5-ton, 6x6, M820	2-3
2-10	Truck, van, expansible, 5-ton, 6x6, M820A2-	2-3
2-11	Truck, stake, bridge, transporting, 5-ton, 6x6, M821-	2-3
2-12	Side elevation of truck, cargo, WWN and WOWN, M813-	2-4
2-13	Rear elevation of truck, cargo, WWN and WOWN, M813-	2-5
2-14	Side elevation of truck, dropside, WWN and WOWN, M813A1-	2-6
2-15	Rear elevation of truck, dropside, WWN and WOWN, M813A1-	2-7
2-16	Side elevation of truck, cargo, WWN and WOWN, M814	2-8
2-17	Rear elevation of truck, cargo, WWN and WOWN, M814	2-9
2-18	Side elevation of truck, logging, bolster, WWN, M815-	2-10
2-19	Rear elevation of truck, logging, bolster, WWN, M815-	2-11
2-20	Side elevation of truck, wrecker, medium, WWN, M816	2-12
2-21	Rear elevation of truck, wrecker, medium, WWN, M816-	2-13
2-22	Side elevation of truck, dump, WWN, M817-	2-14
2-23	Side elevation of truck, dump, WOWN, M817-	2-15
2-24	Rear elevation of truck, dump, WWN, M817-	2-16
2-25	Rear elevation of truck, dump, WOWN, M817-	2-17
2-26	Side elevation of truck, tractor, WWN and WOWN, M818	2-18
2-27	Rear elevation of truck, tractor, WWN and WOWN, M818-	2-19
2-28	Side elevation of truck, tractor, wrecker, WWN, M819-	2-20
2-29	Rear elevation of truck, tractor, wrecker, WWN, M819-	2-21
2-30	Side elevation of truck, van, expansible, WOWN, M820-	2-22
2-31	Rear elevation of truck, van, expansible, WOWN, M820-	2-23

Figure number	Title	Page
2-32	Side elevation of truck, van, expansible, WOWN, M820A2-	2-24
2-33	Rear elevation of truck, van, expansible, WOWN, M820A2-	2-25
2-34	Side elevation of truck, stake, bridge, WWN, M821-	2-26
2-35	Rear elevation of truck, stake, bridge, WWN, M821-	2-27
4-1	Tiedown diagram for M814 in C-5 aircraft -	4-3
4-2	Tiedown diagram for M814 in C-130 aircraft -	4-4
4-3	Tiedown diagram for M814 in C-141 aircraft-	4-5
4-4	Tiedown diagram for M816 in C-5 aircraft -	4-6
4-5	Tiedown diagram for M817 in C-5 aircraft -	4-7
4-6	Tiedown diagram for M817 in C-130 aircraft -	4-8
4-7	Tiedown diagram for M817 in C-141 aircraft -	4-9
5-1	Blocking and tiedown of typical M809-series truck on M127-series 12-ton or larger semitrailer -	5-2
5-2	Rear view of blocking and tiedown of typical M809-series truck on M127-series 12-ton or larger semitrailer -	5-3
5-3	Blocking and tiedown details -	5-4
5-4	Tracking diagram for semitrailer, M127A1, and truck, tractor, M818 -	5-5
5-5	Blocking and tiedown of typical M809-series truck on M270 semitrailer -	5-6
5-6	Tracking diagram for semitrailer, M270, and truck, tractor, M818 -	5-7
6-1	Lifting diagram for M816 using eight wire slings and two spreader bars -	6-3
6-2	Lifting diagram for M817 using eight wire slings and two spreader bars -	6-4
6-3	Lifting diagram for M818 using six wire slings and one spreader bar -	6-5
6-4	Lifting diagram for M820 using eight wire slings and two spreader bars -	6-6
6-5	Typical blocking and tiedown of M809-series truck in general cargo vessel -	6-7
7-1	Blocking and tiedown of typical M809-series truck on CONUS general-purpose flatcar -	7-2
7-2	Blocking and tiedown detail diagram for typical M809-series truck on CONUS general-purpose flatcar -	7-3
7-3	Securing M809-series trucks on empty flatcars equipped with center tiedown rails -	7-4

## CHAPTER I

### INTRODUCTION

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#### 1-1. Purpose and Scope

This manual provides transportability guidance for logistic handling and movement of the trucks, 5-ton, 6x6, M809-series. It provides transportation officers down to division level and other personnel engaged in or responsible for movement or providing transportation services with information considered appropriate to safe transport. Significant technical and physical characteristics as well as safety considerations required for worldwide movement by the various modes of transportation are included. When considered necessary, metric equivalents are given in parentheses following dimensions or other measurement.

#### 1-2. Reporting of Recommendations and Comments

The reporting of errors, omissions, and recommendations for improving this manual by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to DA Publications and Blank Forms)

and forwarded direct to Director, Military Traffic Management and Terminal Service Transportation Engineering Agency, AITN: M'IT-GDP, PO Box 6276, Newport News, Virginia 23606.

#### 1-3. Safety

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

#### 1-4. 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.** An operating procedure or practice that, if not correctly followed, could result in personal injury or loss of life.

b. **Caution.** An operating procedure or practice that, if not strictly observed, could result in damage to or destruction of equipment.

c. **Note.** An operating procedure or condition that must be emphasized.

## CHAPTER 2

### TRANSPORTABILITY DATA

#### Section I. GENERAL

##### 2-1. Scope

This chapter provides a general description of the M809-series trucks, identification photographs, and tabulated transportability characteristics and data that are necessary in movement of the vehicles.

##### 2-2. Description

The trucks, 5-ton, 6x6, covered in this manual are all of the M809-series. The model types are of various wheel bases and body styles; all having a tandem rear axle and dual rear tires. All models are powered by a 250-horsepower Cummins (NHL-250) diesel engine. A brief description of the various chassis and body types follows:

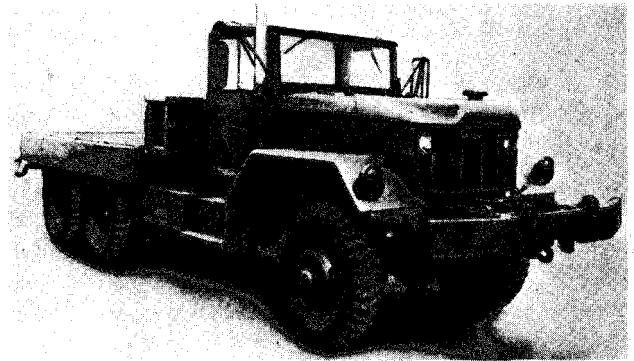
a. *Truck, Cargo, M813 (Fig 2-1).* This truck has a 179-inch wheel base, with a 7- x 14-foot flatbed cargo box (550 cubic feet).

b. *Truck, Cargo, Dropside, M813A1 (Fig 2-2).* This truck has a 179-inch wheel base, with a 7- by 14-foot flatbed cargo box (550 cubic feet). The dropside feature provides a 147 1/2-inch access opening on each side.

c. *Truck, Cargo, M814 (Fig 2-3).* This truck has a 215-inch wheel base, with a 7- x 20-foot flatbed cargo box (744 cubic feet).



**Figure 2-1.** *Truck, cargo, 5-ton, 6x6, M813.*



**Figure 2-2.** *Truck, cargo, dropside, 5-ton, 6x6, M813A1.*



**Figure 2-3.** *Truck, cargo, 5-ton, 6x6, M814.*

d. *Truck, Logging, Bolster, M815 (Fig 2-4).* This truck has a 179-inch wheel base and is normally used in conjunction with the P14 bolster trailer for transporting utility poles, bridging sections, etc. The cab is standardly equipped with a sheet metal top.

e. *Truck, Wrecker, M816 (Fig 2-5).* This truck has a 179-inch wheel base, with a 20,000-pound-capacity hydraulically operated crane and a 10-foot to 18-foot boom.

f. *Truck, Dump, M817 (Fig 2-6).* This truck has a 167-inch wheel base, with an hydraulically



Figure 2-4. Truck, logging, bolster, 5-ton, 6x6, M815.

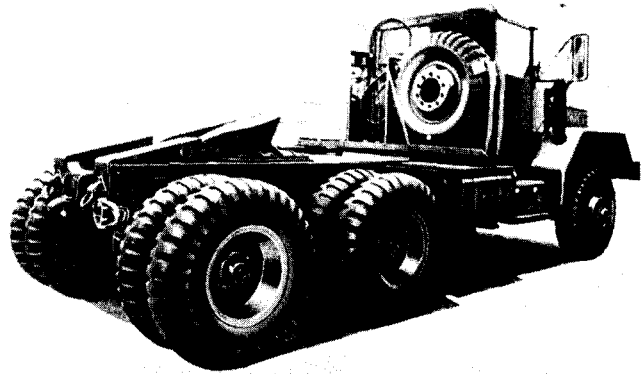


Figure 2-7. Truck, tractor, 5-ton, 6x6, M818.

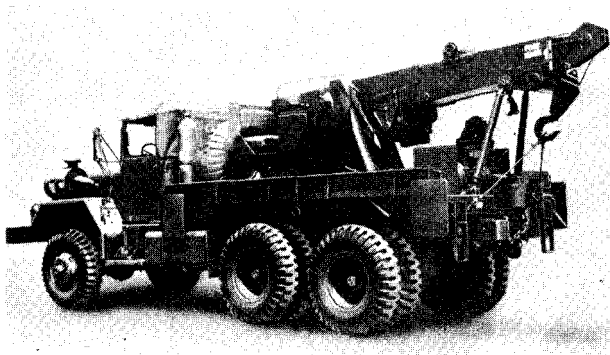


Figure 2-5. Truck, wrecker, medium, 5-ton, 6x6, M816.

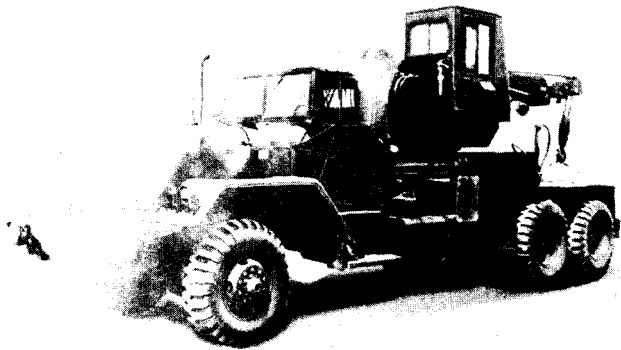


Figure 2-8. Truck, tractor, wrecker, 5-ton, 6x6, M819.

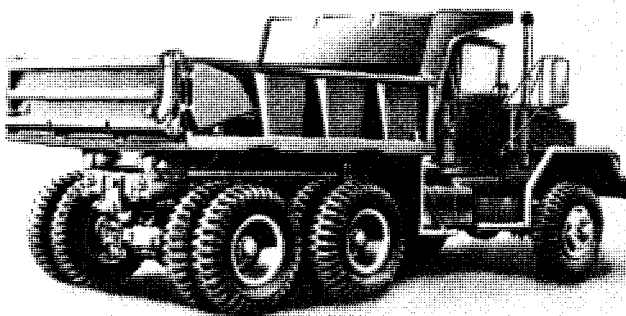


Figure 2-6. Truck, dump) 5-ton, 6x6, M817.

operated 5-cubic yard dump box with twin cylinder hoist assembly.

g. *Truck, Tractor, M818 (Fig 2-7).* This truck has a 167-inch wheel base, with a universal 33-inch fifth wheel and approach and deck

plates. The tractor-to-trailer brake hoses and connections are mounted behind the cab.

h. *Truck, Tractor, Wrecker, M819 (Fig 2-8).* This truck has a 215-inch wheel base, with a 20,000-pound-capacity hydraulically operated crane and a n-foot 6-inch to 28-foot boom. It has a 33-inch universal fifth wheel and approach and deck plates mounted on the rear of the chassis.

i. *Truck, Van, Expansible, M820 (Fig 2-9).* This truck has a 215-inch wheel base. The van provides a 17-foot body designed for side expansion from the traveling position of 82 inches to 160 inches. The body is equipped with a heating and cooling system, deriving electrical power from an outside source.

j. *Truck, van, Expansible, M820A2 (Fig 2-10).* This truck has a 215-inch wheel base and is basically the same as the M820. It is specifically





Figure 2-9. Truck, van, expandible, 5-ton, 6x6, M820.

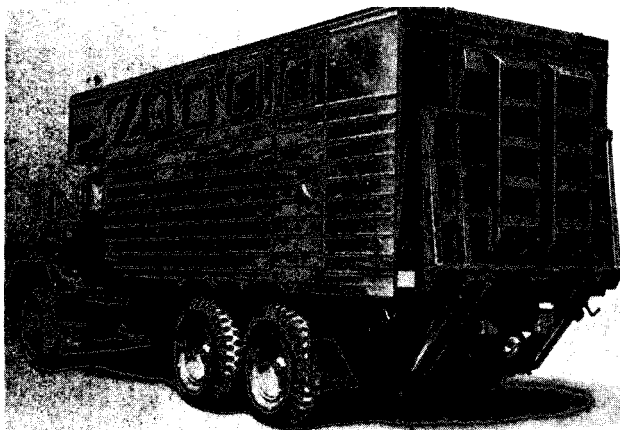


Figure 2-10. Truck, van, expandible, 5-ton 6x6 M820A2.

modified for special application as a tactical image interpretation facility by the Electronics Command. It is further equipped with a 3,000-pound power lift gate.

k. *Truck, Stake, Bridge, Transporting, M821* (Fig 2-11). This truck has a 215-inch wheel base, with a specifically designed stake body for transporting bridge building equipment.

**NOTE**

All trucks have 11:00 x 20 tires except the M819, which has 12:00 x 20 and the M821, which has 14:00 x 20 tires.

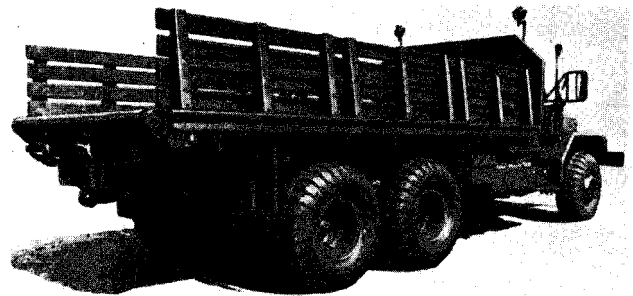


Figure 2-11. Truck, stake, bridge, transporting, 5-ton, 6x6, M821.

**Section II. CHARACTERISTICS AND RELATED DATA OF ITEMS**

**2-3. General**

Truck characteristics contained in table 2-1 are applicable to model number or Federal Stock Number (FSN) shown. Changes in model number or FSN may affect the loadability of the trucks as related to the guidance shown in this manual.

**2-4. Side- and End-Elevation Drawings**

This chapter provides drawings (fig 2-12 through 2-35) that are necessary for determining the loadability of the vehicles for movement by various transportation modes.

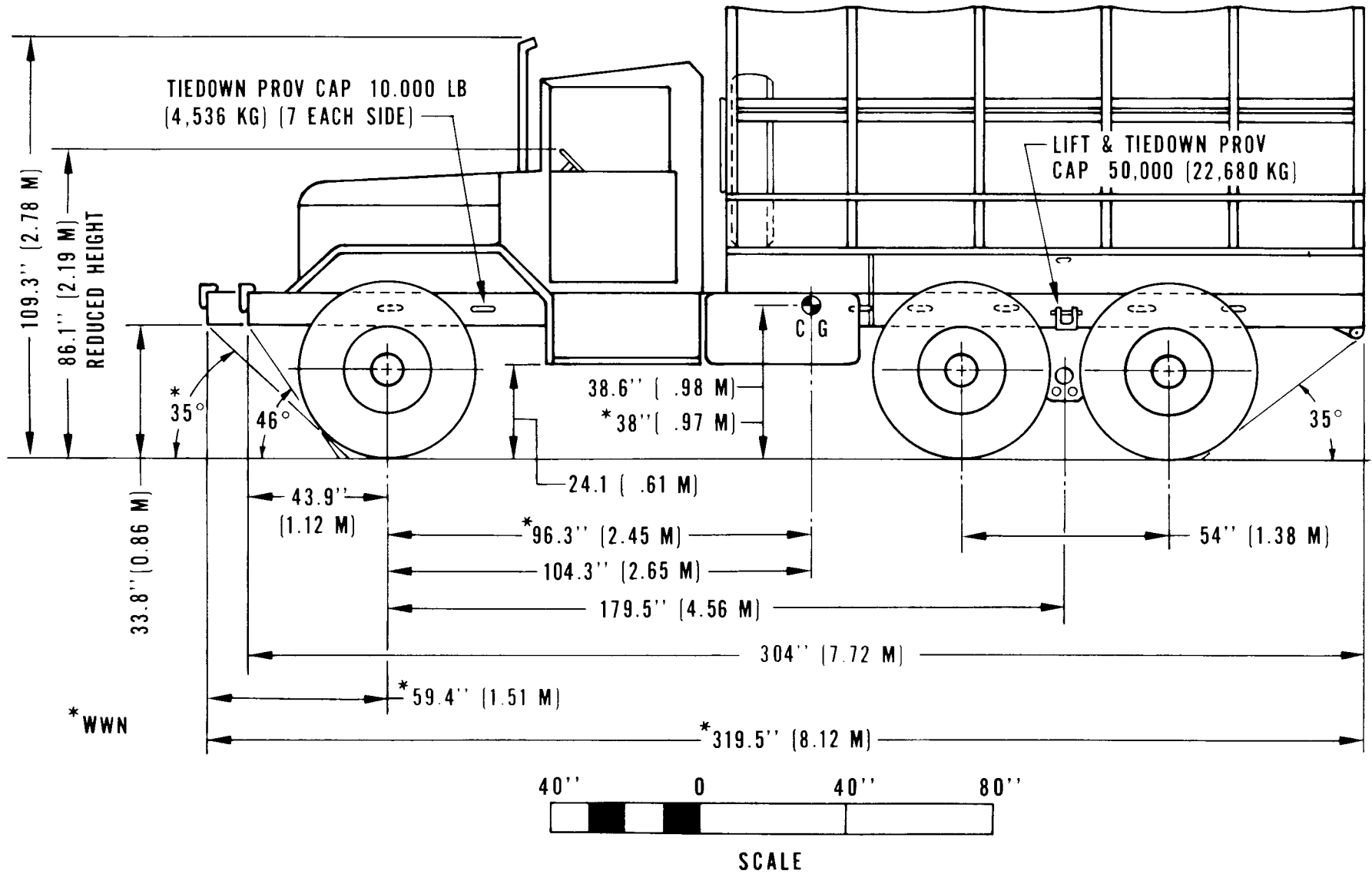


Figure 2-12. Side elevation of truck, cargo, WWN and WOWN, M813.

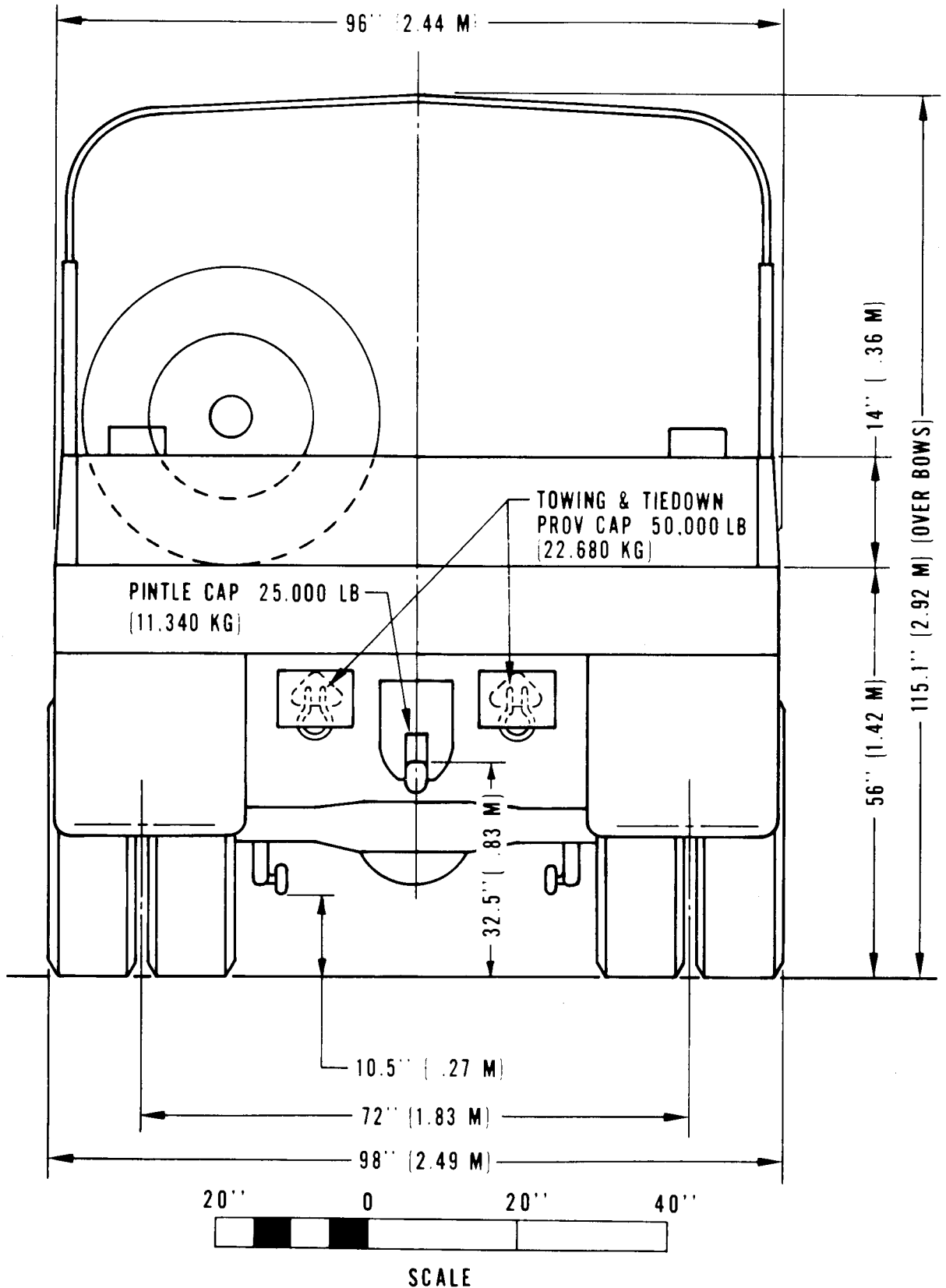


Figure 2-13. Rear elevation of truck, cargo, WVN and WOWN, M818.

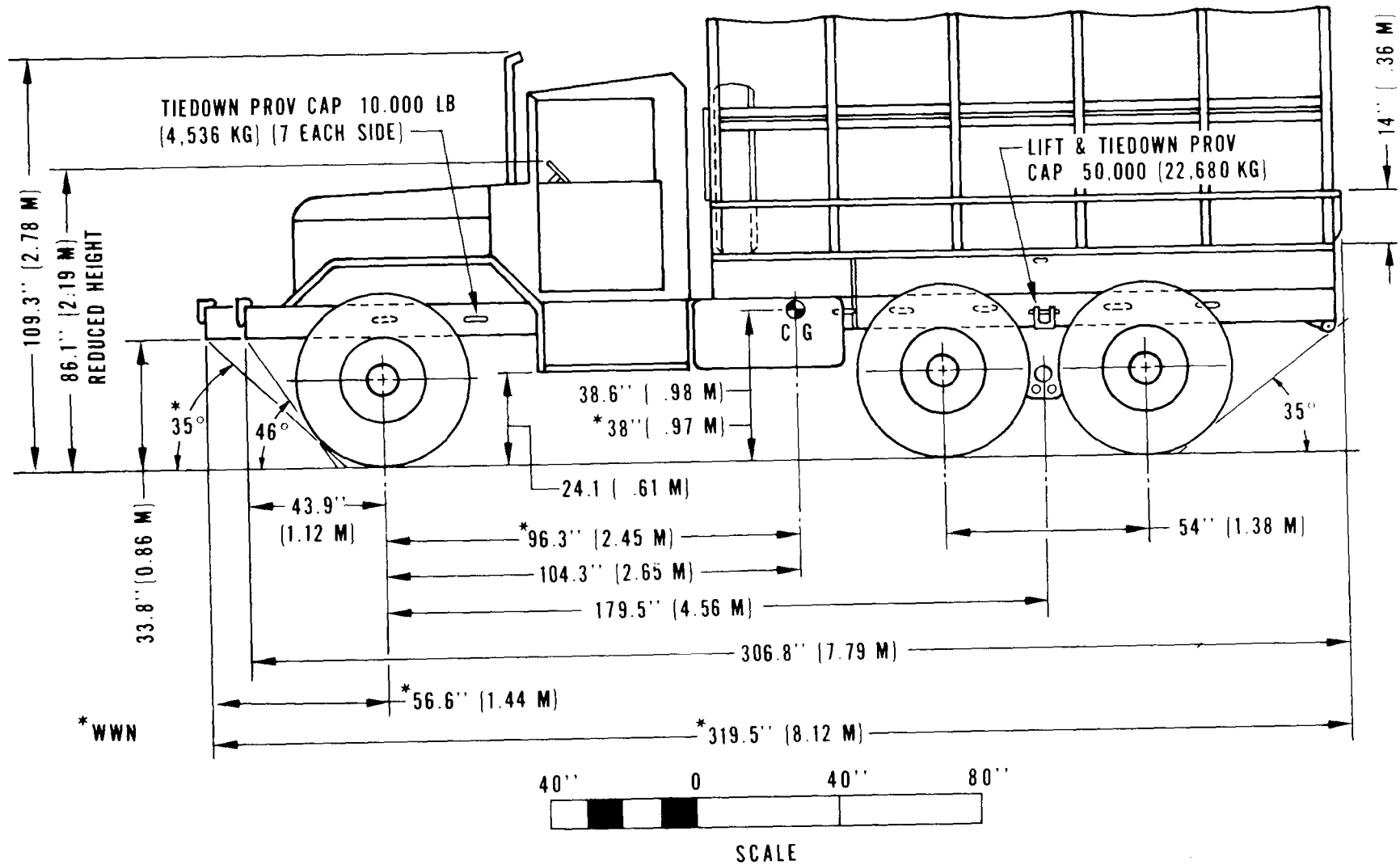


Figure 2-14. Side elevation of truck, dropside, WVN and WOWN, M813A1.

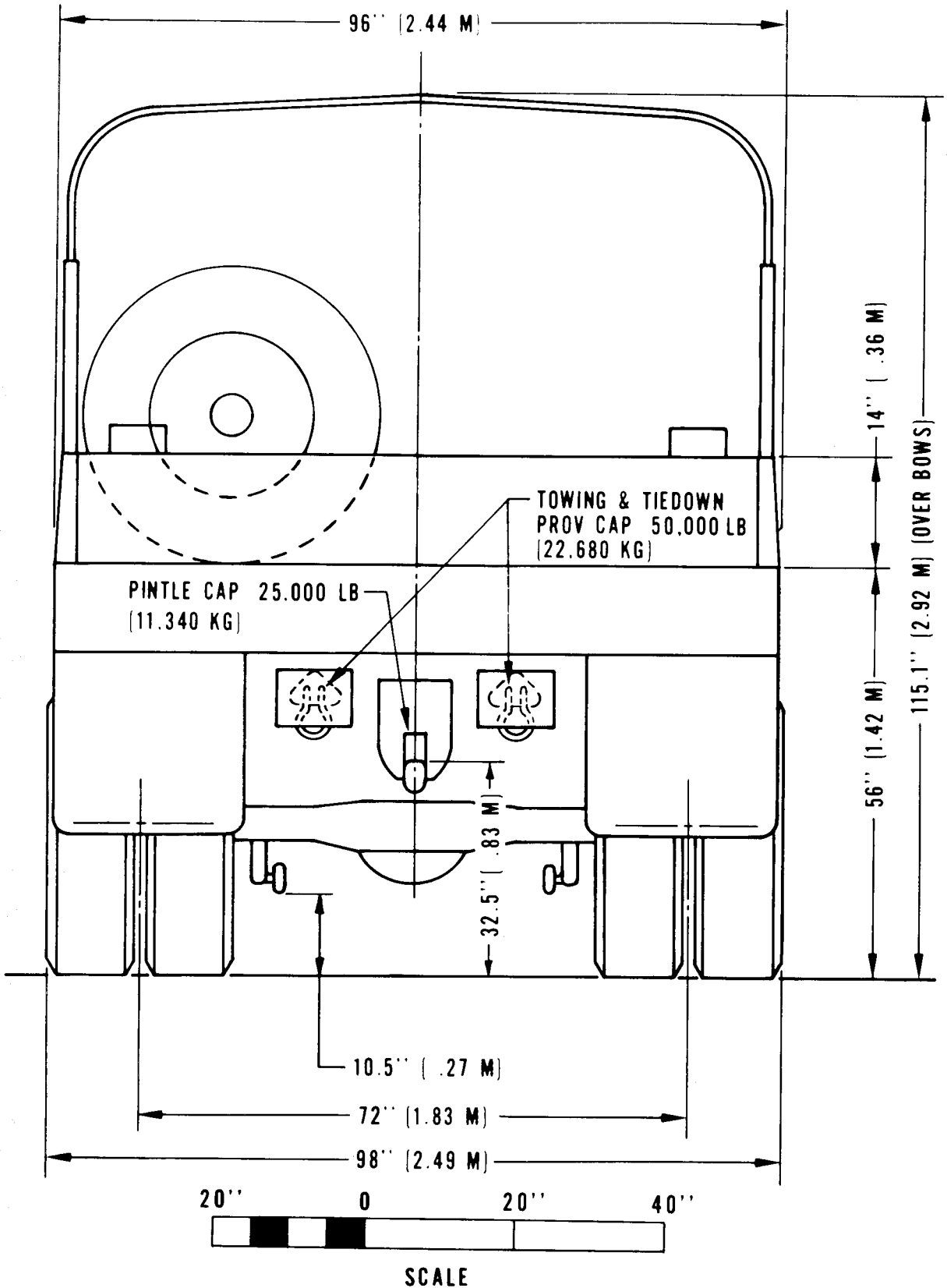


Figure 2-15. Rear elevation of truck, dropside, WWN and WOWN, M813A1.

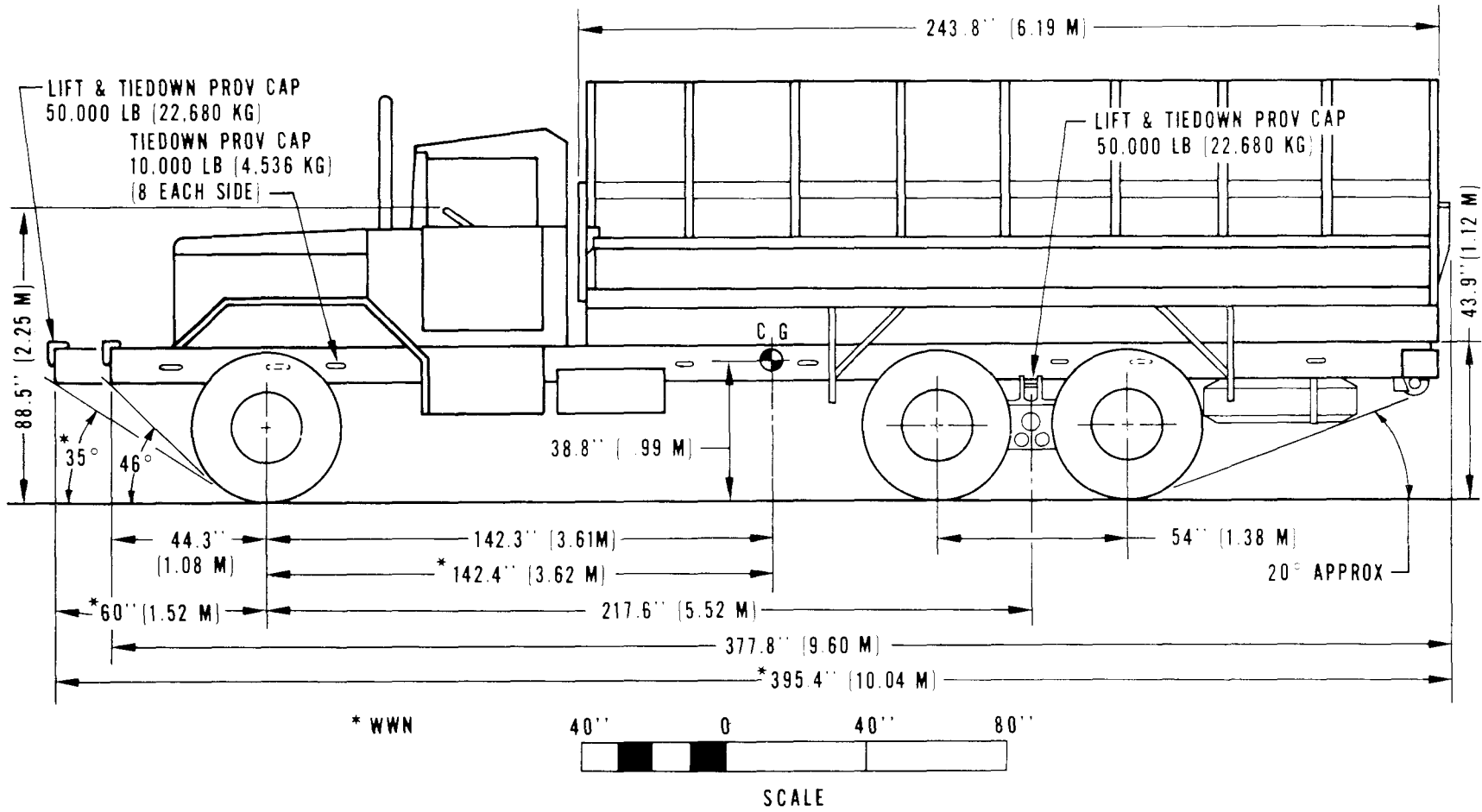


Figure 2-16. Side elevation of truck, cargo, WVN and WOWN, M814.

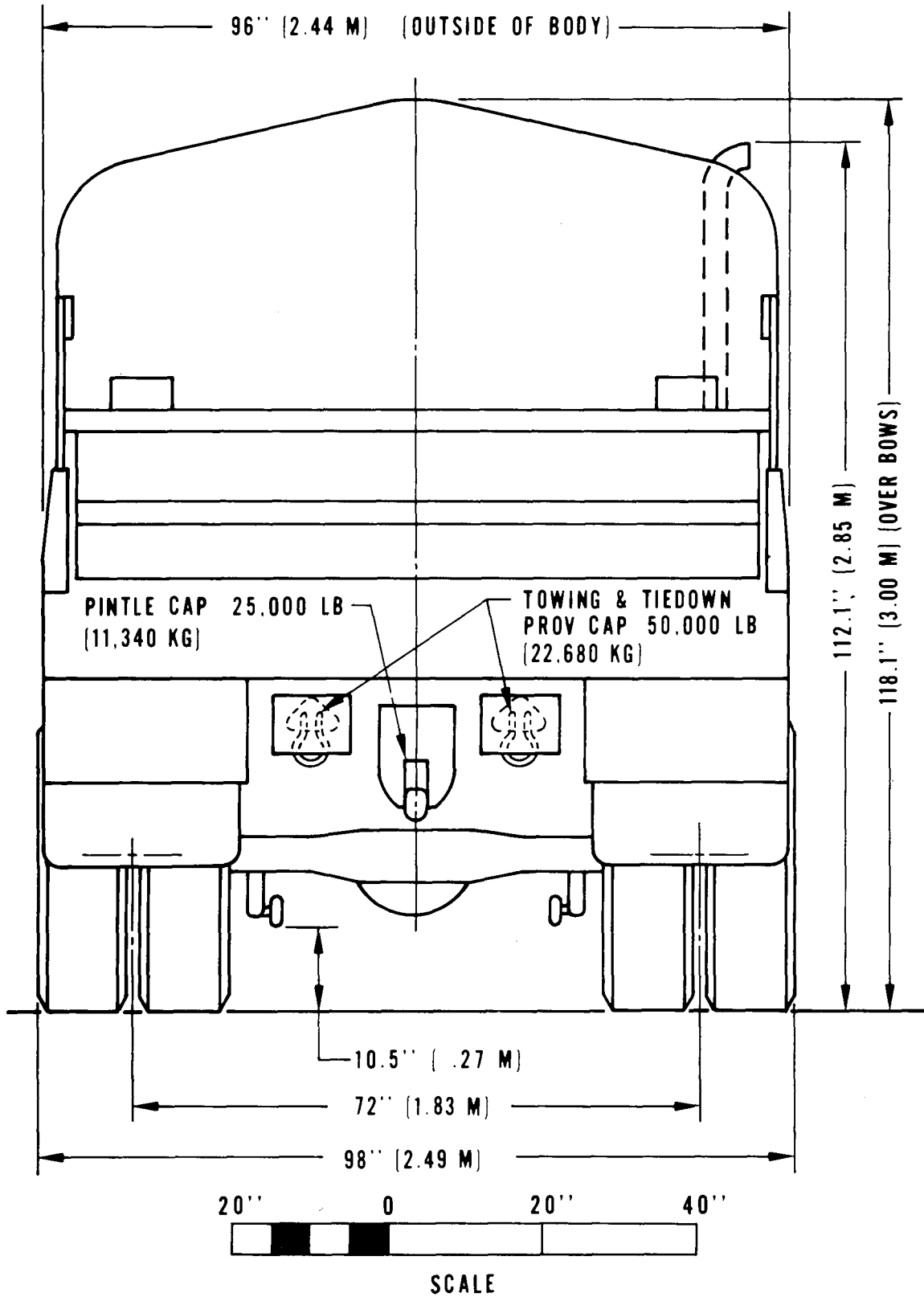


Figure 2-17. Rear elevation of truck, cargo, WVN and WOWN, M814.