

REVIEWED BY  
MTMC

SIGNED



MTMC-TEA

DATE 16 Aug 96

## MULTIPLE SYSTEMS

MINIMUM REQUIREMENTS FOR THE HANDLING, STOWAGE, AND LASHING ABOARD SHIPS OF GROUND BASED SENSOR (GBS), AN/MPQ-64, MOUNTED ON A 1-1/2 TON, 2-WHEEL, M103 SERIES TRAILER, AND THE SHELTER/GENERATOR PALLET MOUNTED ON A 5-TON CARGO TRUCK, M923

### U.S. ARMY MATERIEL COMMAND DRAWING

APPROVED, U.S. ARMY MISSILE COMMAND



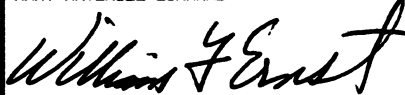
DRAFTSMAN

TECHNICIAN

ENGINEER

R. HAYNES

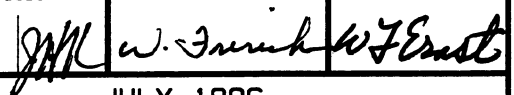
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND



VALIDATION  
ENGINEERING  
DIVISION

TRANSPORTATION  
ENGINEERING  
DIVISION

LOGISTICS  
ENGINEERING  
OFFICE



JULY 1996

U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL

CLASS

DIVISION

DRAWING

FILE

19

48

7309

GSE18MS4

DO NOT SCALE

PROJECT GSE 756-95

## NOTES

### GENERAL:

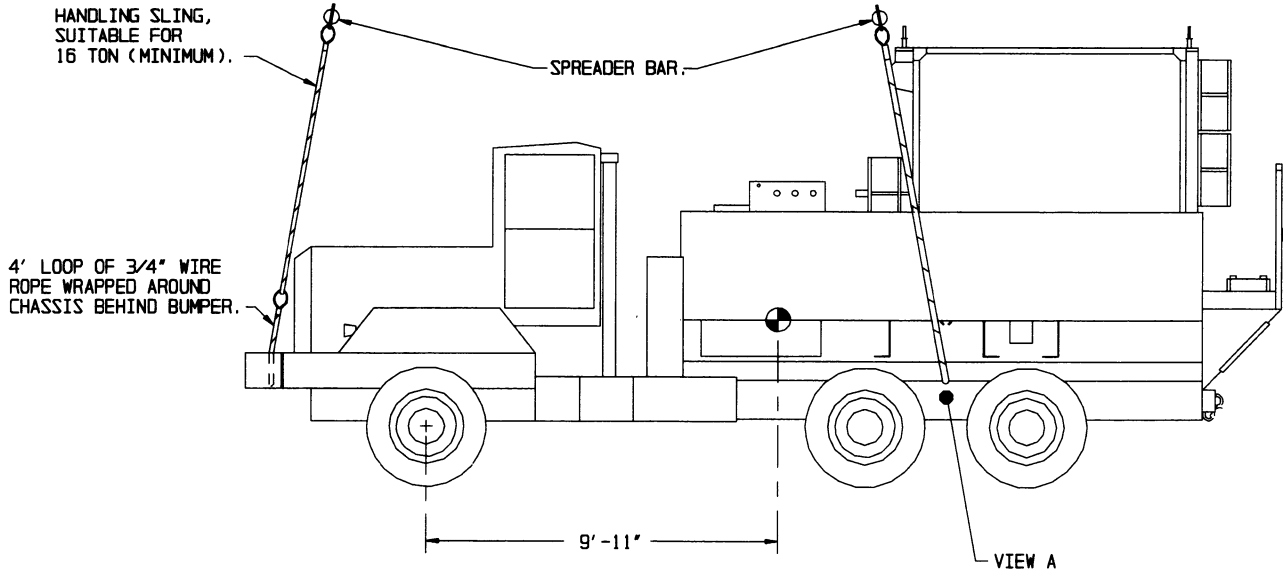
- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1.
- B. THIS DRAWING DEPICTS MINIMUM PROCEDURES APPLICABLE TO THE HANDLING, STOWAGE AND LASHING ABOARD SHIPS OF GROUND BASED SENSOR (GBS), AN/MPO-64, MOUNTED ON A 1-1/2 TON, 2-WHEEL, M103 SERIES TRAILER, AND THE SHELTER/GENERATOR PALLET MOUNTED ON A 5-TON CARGO TRUCK, M923.
- C. OTHER TYPES OF CARGO MAY BE STORED IN THE SAME HOLD OR TWEEN DECK WITH THE ITEMS SPECIFIED HEREIN.
- D. LADING DATA:  
GBS TRAILER DIMENSIONS -- 14'-4-1/2" LONG BY 7'-1" WIDE BY 7'-11-1/2" HIGH.  
GROSS WEIGHT -- 4,023 POUNDS (APPROX).  
CUBE -- -- -- -- 810 CU FT (APPROX).  
  
SHELTER/GENERATOR PALLET TRUCK DIMENSIONS -- 28'-1" LONG 8'-1-1/2" WIDE BY 11'-10-1/2" HIGH.  
GROSS WEIGHT -- 31,921 POUNDS (APPROX).  
CUBE -- -- -- -- 2,710 CU FT (APPROX).
- E. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENTS MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4 MM, AND ONE POUND EQUALS 0.45KG.
- F. THE PROCEDURES DEPICTED WITHIN THIS DRAWING HAVE BEEN PREPARED IN ACCORDANCE WITH MTMCTEA REFERENCE 95-55-22, MARINE LIFTING AND LASHING HANDBOOK, MARCH 1995.

### HANDLING:

- A. PERTINENT PROVISIONS OF TITLE 46/49 CODE OF FEDERAL REGULATIONS APPLY.
- B. HANDLING OF THE GBS TRAILER AND SHELTER/GENERATOR TRUCK SHOULD BE ACCOMPLISHED BY USING THE LIFT POINTS DESIGNATED HEREIN.
- C. THE HANDLING SLING SHALL BE OF THE DESIGN AND CONFIGURATION SPECIFIED ON PAGES 3 AND 5 SO AS TO LIFT THE ITEMS IN SUCH A MANNER THAT THE CABLE LEGS DO NOT APPLY EXCESSIVE PRESSURE AGAINST THE FRAMING, SUPERSTRUCTURE OR OTHER MEMBERS OF THE ITEMS, WHICH MAY DAMAGE THE ITEMS.
- D. EACH LEG OF THE HANDLING SLING MUST BE SECURELY ATTACHED TO A LIFT POINT PRIOR TO LIFTING.
- E. ALTHOUGH DESIRABLE, A LEVEL LIFT IS NOT MANDATORY. THE APPROXIMATE CENTER OF BALANCE OF THESE ITEMS IS SHOWN TO ASSIST IN DETERMINING CABLE LENGTHS TO ASSURE A SAFE LIFT.

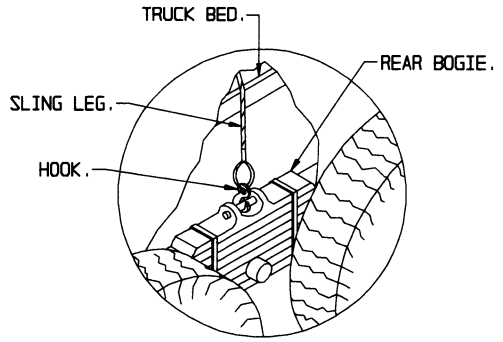
### STOWAGE AND LASHING:

- A. WHEN STOWING THE ITEMS DESIGNATED HEREIN WITHIN THE HOLD OR TWEEN DECK, SPACING BETWEEN VEHICLES SHALL BE A MINIMUM OF 10'. ALSO, OTHER CARGO ITEMS MUST NOT BE STACKED ON TOP OF OR AGAINST ANY OTHER PART OF THE ITEMS IDENTIFIED ABOVE.
- B. LASHING HARDWARE MUST BE CROSSED, IF POSSIBLE, AND ACHIEVE APPROXIMATELY A 25° ANGLE WITH THE DECK.
- C. THE GBS, MOUNTED ON A M103 TRAILER, AND THE SHELTER/GENERATOR PALLET MOUNTED ON A M923 CARGO TRUCK WITH TIE-DOWN DEVICES AS SHOWN HEREIN AND ARE SYMMETRICAL ABOUT THE LONGITUDINAL LINES OF CENTER. THE ITEMS SHOULD BE SECURED FORE AND AFT TO TIEDOWN POINTS USING A MINIMUM OF TWO SYMMETRICALLY LOCATED TIE-DOWN DEVICES IN EACH DIRECTION AS TYPICALLY SHOWN WITHIN THIS DOCUMENT.
- D. TYPICAL TIEDOWN PROCEDURES ARE SHOWN AND DEPICT A METHOD OF USING CABLES AND TURNBUCKLES. IF USED, A TURNBUCKLE MUST BE OF A SIZE EQUAL IN STRENGTH TO THE MINIMUM SIZE CABLE REQUIRED TO SECURE THE ITEMS. IN LIEU OF CABLES AND TURNBUCKLES, SECUREMENT MAY BE ACCOMPLISHED BY OTHER ACCEPTED METHODS.

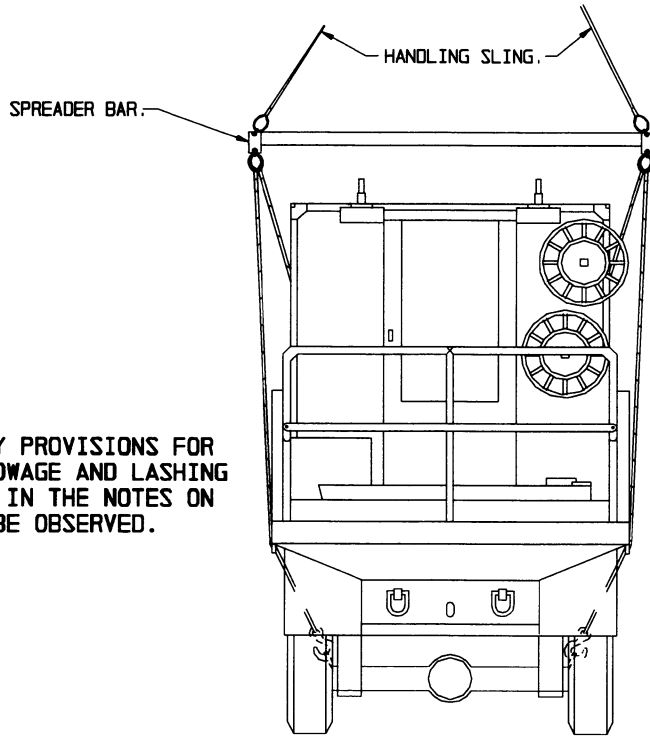


**ELEVATION VIEW**

FOR DIMENSIONS AND WEIGHT, SEE  
GENERAL NOTE "D" ON PAGE 2.



**VIEW A**



**REAR VIEW**

PRECAUTIONARY PROVISIONS FOR  
HANDLING, STOWAGE AND LASHING  
AS SPECIFIED IN THE NOTES ON  
PAGE 2 MUST BE OBSERVED.

**ATTACHMENT OF HANDLING SLING TO TRUCK**

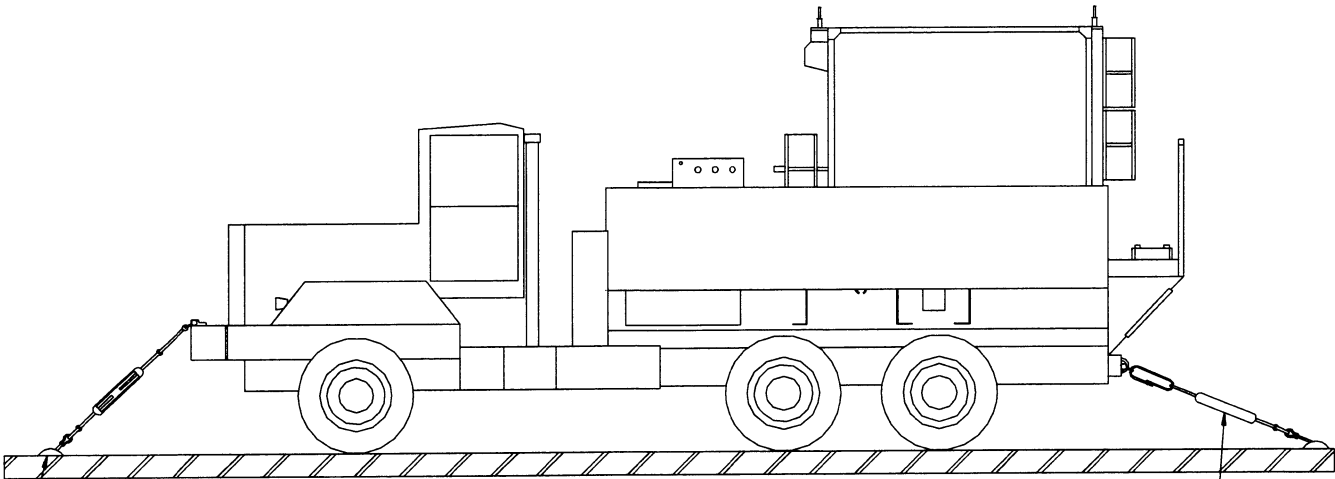
INDICATES DECK TIEDOWN FITTING.



INDICATES TYPICAL LASHING HARDWARE, 32,000 POUND MINIMUM STRENGTH (4 REQD).

**PLAN VIEW**

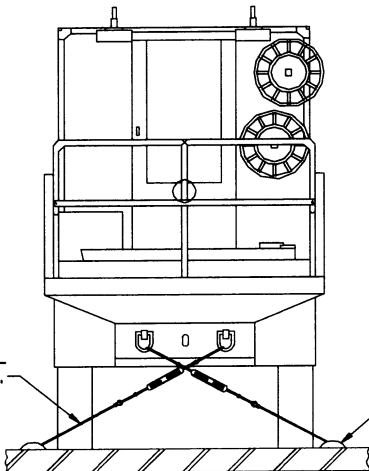
PHANTOM LINES INDICATE TRUCK AND WHEELS.



INDICATES DECK TIEDOWN FITTING.

INDICATES TYPICAL LASHING HARDWARE.

**ELEVATION VIEW**



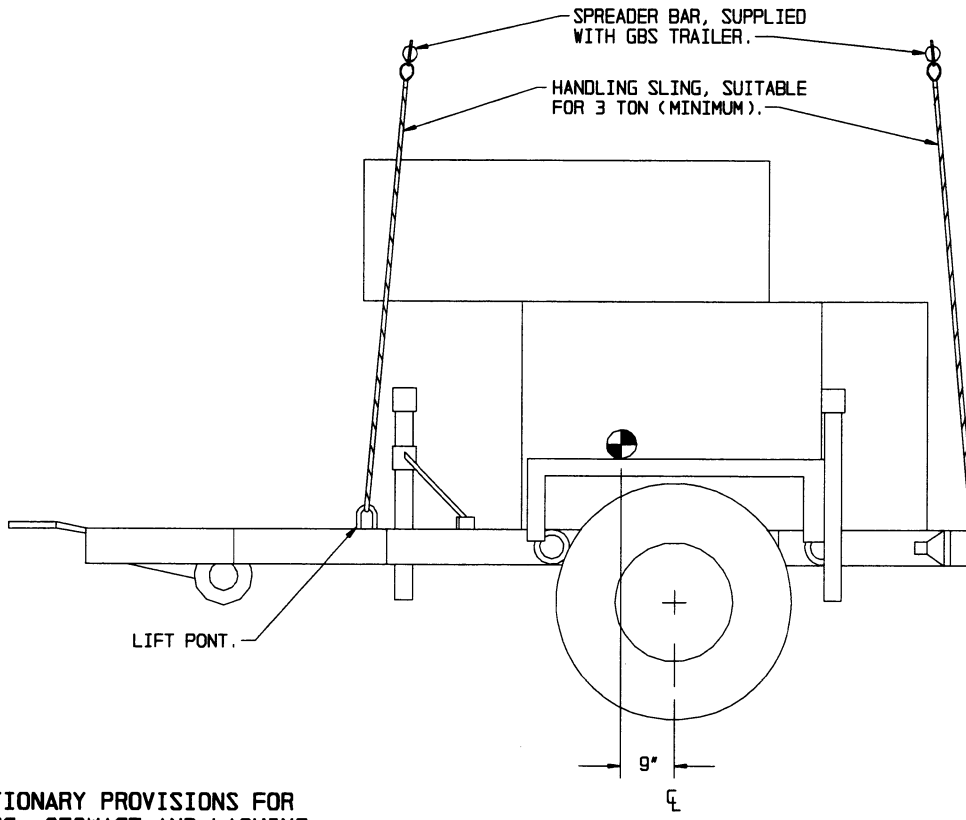
INDICATES TYPICAL LASHING HARDWARE.

INDICATES DECK TIEDOWN FITTING.

**REAR VIEW**

PRECAUTIONARY PROVISIONS FOR HANDLING, STOWAGE AND LASHING AS SPECIFIED IN THE NOTES ON PAGE 2 MUST BE OBSERVED.

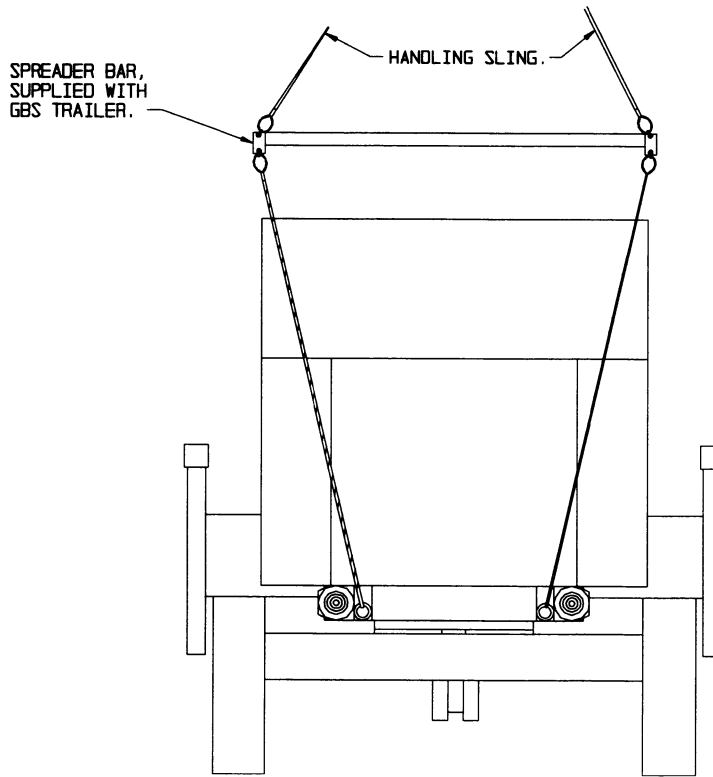
**LASHING OF M923 TRUCK**



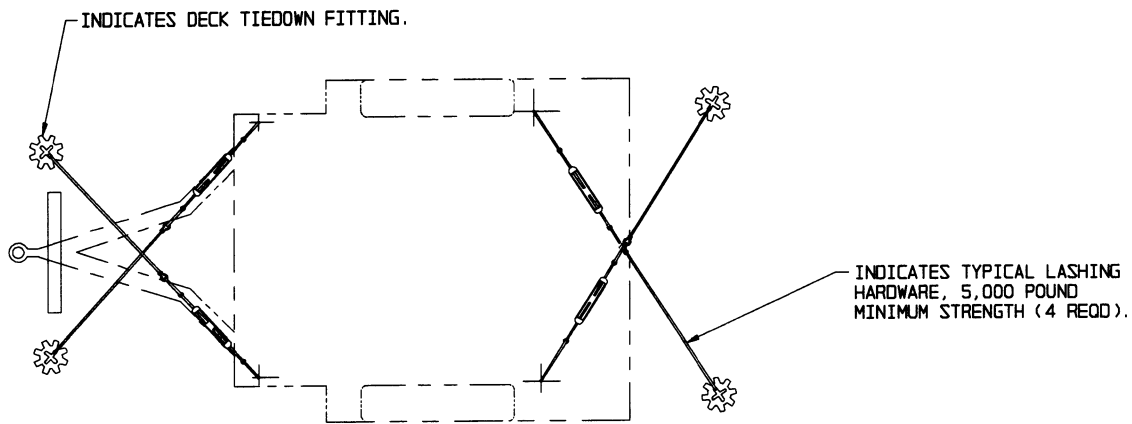
PRECAUTIONARY PROVISIONS FOR HANDLING, STOWAGE AND LASHING AS SPECIFIED IN THE NOTES ON PAGE 2 MUST BE OBSERVED.

**ELEVATION VIEW**

FOR DIMENSIONS AND WEIGHT, SEE GENERAL NOTE "D" ON PAGE 2.

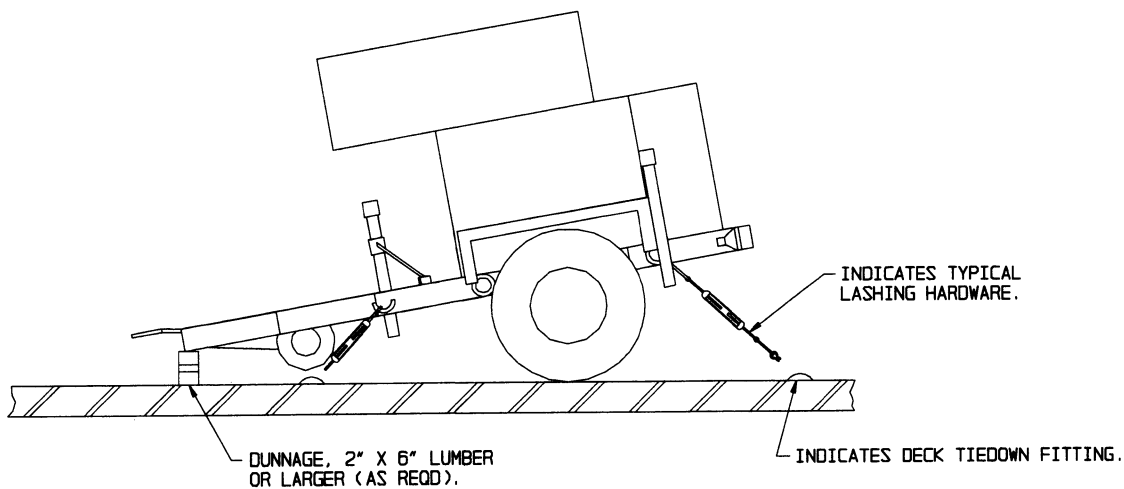


**REAR VIEW**

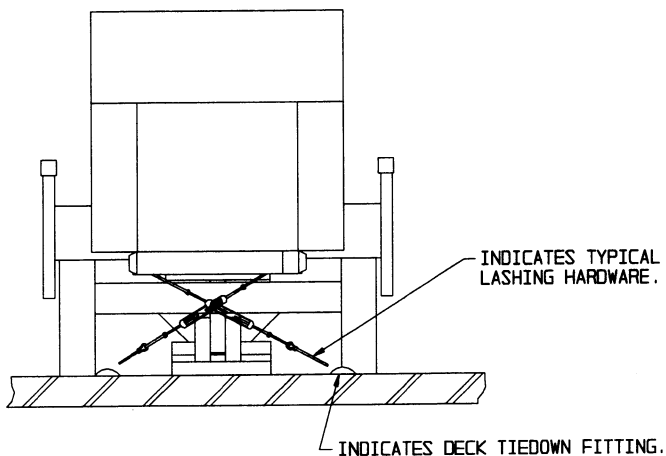


**PLAN VIEW**

PHANTOM LINES INDICATE TRAILER AND TIRES.



**ELEVATION VIEW**



**REAR VIEW**

PRECAUTIONARY PROVISIONS FOR HANDLING, STOWAGE AND LASHING AS SPECIFIED IN THE NOTES ON PAGE 2 MUST BE OBSERVED.