

THAAD

LOADING AND BRACING (TL & LTL) ON SINGLE MISSILE ROUND TRANSPORT CONTAINER (SMRTC) TRANSPORT TRAILER* OF TERMINAL HIGH ALTITUDE AREA DEFENSE (THAAD) MISSILES PACKED SMRTC

INDEX

ITEM	PAGE(S)
GENERAL NOTES AND MATERIAL SPECIFICATIONS - - - - -	2
SMRTC CONTAINER DETAIL - - - - -	3
TWO SMRTC LOAD ON A 48' -0" LONG BY 8' -6" WIDE SMRTC TRANSPORT TRAILER - - -	4
48' -0" LONG BY 8' -6" WIDE SMRTC TRANSPORT TRAILER - - - - -	5

DISTRIBUTION STATEMENT A:

APPROVED FOR PUBLIC RELEASE
DISTRIBUTION IS UNLIMITED.

CAUTION: THE PROCEDURES SHOWN HEREIN ARE ONLY APPLICABLE TO HIGHWAY OR AIR MOVEMENTS, NOT TRAILER-ON-FLATCAR (TOFC) MOVEMENTS.

U.S. ARMY MATERIEL COMMAND DRAWING

<p>APPROVED, U.S. ARMY AVIATION AND MISSILE COMMAND</p> <p>O'CONNOR, DOUGLAS.LEO.114058225 AS.LEO.114058225 1</p> <p><small>Digitally signed by O'CONNOR, DOUGLAS.LEO.1140582251 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=O'CONNOR, DOUGLAS.LEO.1140582251 Date: 2012.03.13 08:25:19 -0500</small></p>	<p>CAUTION: VERIFY PRIOR TO USE AT WWW.DAC.ARMY.MIL THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 6.</p>																						
<p>APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND</p> <p>CARNEY, GARY BURTON.1038708038 RTON.1038708038</p> <p><small>Digitally signed by CARNEY, GARY BURTON.1038708038 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=CARNEY, GARY BURTON.1038708038 Date: 2012.03.13 13:01:38 -0500</small></p> <p style="text-align: center;">U.S. ARMY DEFENSE AMMUNITION CENTER</p>	<p>DO NOT SCALE</p>	<p>MARCH 2012</p>																					
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">ENGINEER OR TECHNICIAN</td> <td style="width: 10%;">BASIC</td> <td colspan="2" style="text-align: center;">RICHARD GARSIDE</td> </tr> <tr> <td></td> <td>REV.</td> <td colspan="2"></td> </tr> </table>	ENGINEER OR TECHNICIAN	BASIC	RICHARD GARSIDE			REV.			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> <tr> <td style="text-align: center;">CLASS</td> <td style="text-align: center;">DIVISION</td> <td style="text-align: center;">DRAWING</td> <td style="text-align: center;">FILE</td> </tr> <tr> <td style="text-align: center;">19</td> <td style="text-align: center;">48</td> <td style="text-align: center;">8234</td> <td style="text-align: center;">GM11TH2</td> </tr> </table>							CLASS	DIVISION	DRAWING	FILE	19	48	8234
ENGINEER OR TECHNICIAN	BASIC	RICHARD GARSIDE																					
	REV.																						
CLASS	DIVISION	DRAWING	FILE																				
19	48	8234	GM11TH2																				
<p>TRANSPORTATION ENGINEERING DIVISION</p> <p>FIEFFER, LAURA.A.1230375727</p> <p><small>Digitally signed by FIEFFER, LAURA.A.1230375727 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=FIEFFER, LAURA.A.1230375727 Date: 2012.02.23 12:50:48 -0600</small></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"> <p>VALIDATION ENGINEERING DIVISION</p> <p>BARICKMAN, PHILIP.W.1230202202</p> <p><small>Digitally signed by BARICKMAN, PHILIP.W.1230202202 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=BARICKMAN, PHILIP.W.1230202202 Date: 2012.03.13 07:01:01 -0500</small></p> </td> <td style="width: 50%; text-align: center;"> <p>TESTED</p> </td> </tr> </table>	<p>VALIDATION ENGINEERING DIVISION</p> <p>BARICKMAN, PHILIP.W.1230202202</p> <p><small>Digitally signed by BARICKMAN, PHILIP.W.1230202202 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=BARICKMAN, PHILIP.W.1230202202 Date: 2012.03.13 07:01:01 -0500</small></p>	<p>TESTED</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> <tr> <td style="text-align: center;">CLASS</td> <td style="text-align: center;">DIVISION</td> <td style="text-align: center;">DRAWING</td> <td style="text-align: center;">FILE</td> </tr> <tr> <td style="text-align: center;">19</td> <td style="text-align: center;">48</td> <td style="text-align: center;">8234</td> <td style="text-align: center;">GM11TH2</td> </tr> </table>							CLASS	DIVISION	DRAWING	FILE	19	48	8234	GM11TH2					
<p>VALIDATION ENGINEERING DIVISION</p> <p>BARICKMAN, PHILIP.W.1230202202</p> <p><small>Digitally signed by BARICKMAN, PHILIP.W.1230202202 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=BARICKMAN, PHILIP.W.1230202202 Date: 2012.03.13 07:01:01 -0500</small></p>	<p>TESTED</p>																						
CLASS	DIVISION	DRAWING	FILE																				
19	48	8234	GM11TH2																				
<p>ENGINEERING DIRECTORATE</p> <p>BEAVER, JERRY.W.1230949952</p> <p><small>Digitally signed by BEAVER, JERRY.W.1230949952 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=BEAVER, JERRY.W.1230949952 Date: 2012.02.28 07:31:05 -0600</small></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> <tr> <td style="text-align: center;">CLASS</td> <td style="text-align: center;">DIVISION</td> <td style="text-align: center;">DRAWING</td> <td style="text-align: center;">FILE</td> </tr> <tr> <td style="text-align: center;">19</td> <td style="text-align: center;">48</td> <td style="text-align: center;">8234</td> <td style="text-align: center;">GM11TH2</td> </tr> </table>							CLASS	DIVISION	DRAWING	FILE	19	48	8234	GM11TH2								
CLASS	DIVISION	DRAWING	FILE																				
19	48	8234	GM11TH2																				

GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE OUTLOADING PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO LOADS OF THAAD MISSILE PACKED IN SMRTC. SUBSEQUENT REFERENCE TO CONTAINER HEREIN MEANS SMRTC WITH THAAD MISSILE. SEE PAGE 3 AND LOCKHEED MARTIN DRAWING 13552055 FOR DETAILS OF THE SMRTC.
- C. THE LOAD AS SHOWN HEREIN IS BASED ON 48'-0" LONG BY 8'-6" WIDE SMRTC TRANSPORT TRAILER EQUIPPED WITH ISO LOCKS, IDENTIFIED BY NSN 2330-01-598-1548. FURTHER TRAILER DETAILS CAN BE FOUND IN THE TECHNICAL MANUAL: "SMRTC TRAILER OPERATOR/MAINTAINER MANUAL".
- D. SELECTION OF A VEHICLE FOR THE TRANSPORT OF THE DESIGNATED ITEM IS THE RESPONSIBILITY OF THE ORIGINATING CARRIER AND THE SHIPPER. ONLY VEHICLES IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE REGULATORY DOCUMENTS WILL BE SELECTED FOR USE.
- E. GROSS WEIGHT AND AXLE DISTRIBUTION OF WEIGHT FOR A LOAD WILL BE THE RESPONSIBILITY OF THE CARRIER. THE CARRIER WILL ADVISE THE SHIPPER OF APPLICABLE LOADING REQUIREMENTS, AND THE SHIPPER WILL LOAD ACCORDINGLY.
- F. THE APPROVED METHODS SHOWN HEREIN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING AND STAYING OF THE DESIGNATED ITEM. **NOTICE:** A SHIPMENT WILL BE POSITIONED ON A TRAILER CONSISTENT WITH STATE WEIGHT LAWS.
- G. SELECTION OF A VEHICLE USED TO TRANSPORT THE DESIGNATED ITEM MUST COMPLY WITH AR 55-355, CHAPTER 29, FOR EXPLOSIVES AND OTHER DANGEROUS ARTICLES, IN FULL.
- H. THESE PROCEDURES CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE CONTAINERS WHEN THEY ARE LOADED WITH AN ITEM WHICH IS IDENTIFIED DIFFERENTLY BY NOMENCLATURE THAN THE ITEM IDENTIFIED IN THE DRAWING TITLE, OR WHEN THEY ARE EMPTY.

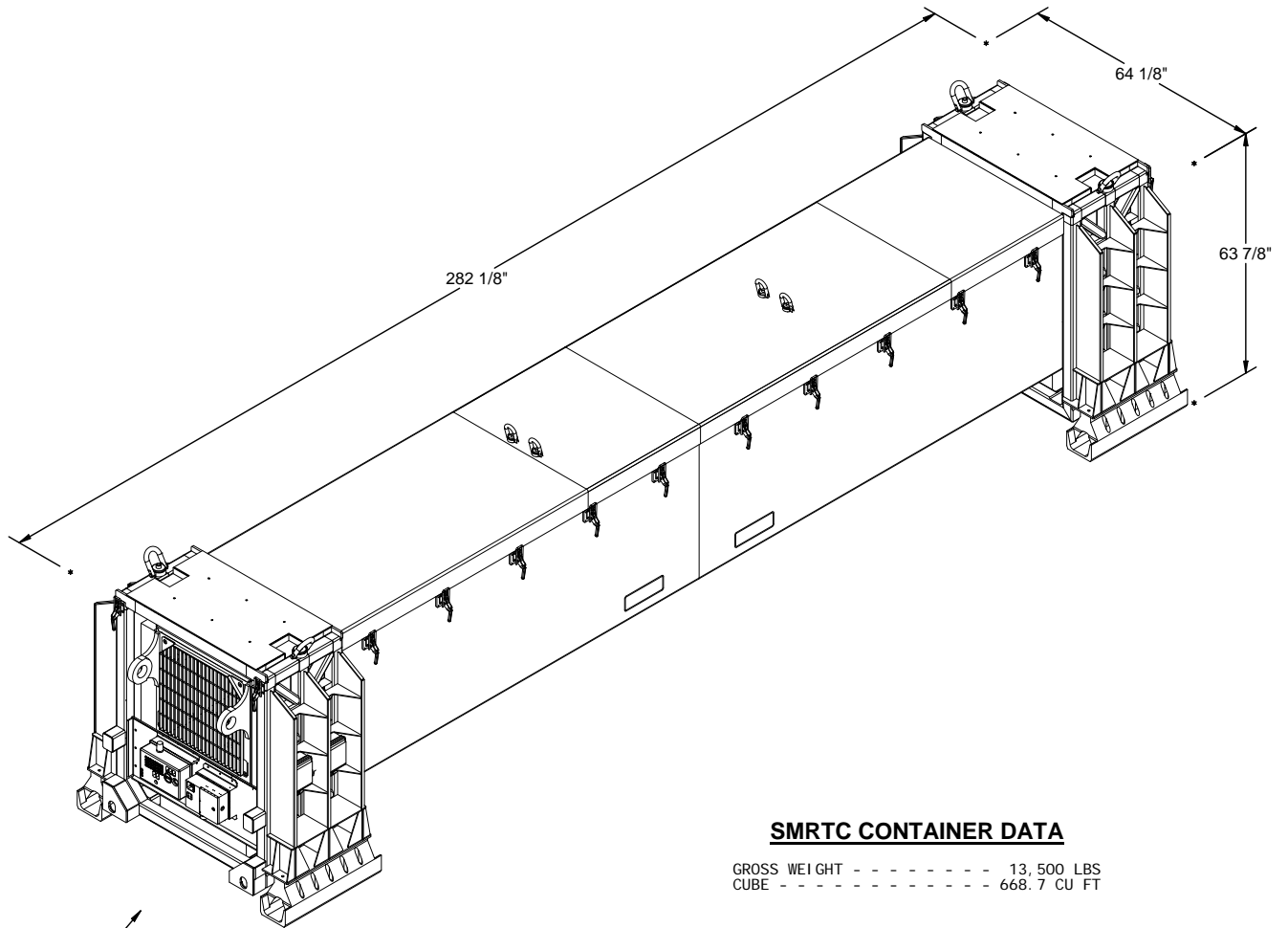
(CONTINUED AT RIGHT)

(GENERAL NOTES CONTINUED)

- J. 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 25.4MM, AND ONE POUND EQUALS 0.454 KG.
- K. **CAUTION:** REGARDLESS OF THE TYPE OF TRAILER INVOLVED, ONLY THOSE TRAILERS HAVING TIEDOWN ANCHORING FACILITIES WHICH PROVIDE HOLDING STRENGTH EQUAL TO OR GREATER THAN THE STRENGTH OF THE HOLD-DOWN STRAPS OR CHAINS AND WHICH ALIGN NEAR THE INDICATED LOCATIONS FOR THE HOLD-DOWN STRAPS OR CHAINS SHOULD BE USED. IF THE TRAILER ANCHOR DEVICES ARE NOT PROPERLY POSITIONED TO RECEIVE STRAPPING OR CHAINS, AS SHOWN, OR IF THE ANCHOR DEVICES ARE NOT EQUAL TO OR GREATER THAN THE STRENGTH OF THE TIEDOWN STRAPS OR CHAINS, STEEL STRAPS MAY BE APPLIED TO FORM A COMPLETE LOOP WHICH ENCOMPASSES BOTH THE LADING AND THE TRAILER FRAME AND/OR BED. CAUTION: AVOID TRAILER WHEELS, FIFTH WHEEL PLATE CONTROLS AND OTHER APPURTENANCES. USE EDGE PROTECTORS OR PADS ON ALL SHARP EDGES. NEITHER CHAINS NOR WEB STRAPS WILL BE APPLIED TO FORM A COMPLETE LOOP THAT ENCOMPASSES THE LADING AND THE TRAILER FRAME AND/OR BED.
- L. THE TRANSPORTING VEHICLE OPERATOR SHOULD BE INSTRUCTED TO PERIODICALLY INSPECT THE WEB STRAP ASSEMBLIES, WHEN USED, DURING TRANSIT AND TIGHTEN IF NECESSARY.
- M. THE NUMBER OF LADING UNITS MAY BE ADJUSTED TO FIT THE SIZE OF THE TRAILER TO BE LOADED OR THE QUANTITY TO BE SHIPPED. THE APPROVED METHODS SHOWN HEREIN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING AND STAYING OF THE DESIGNATED ITEM.

MATERIAL SPECIFICATIONS

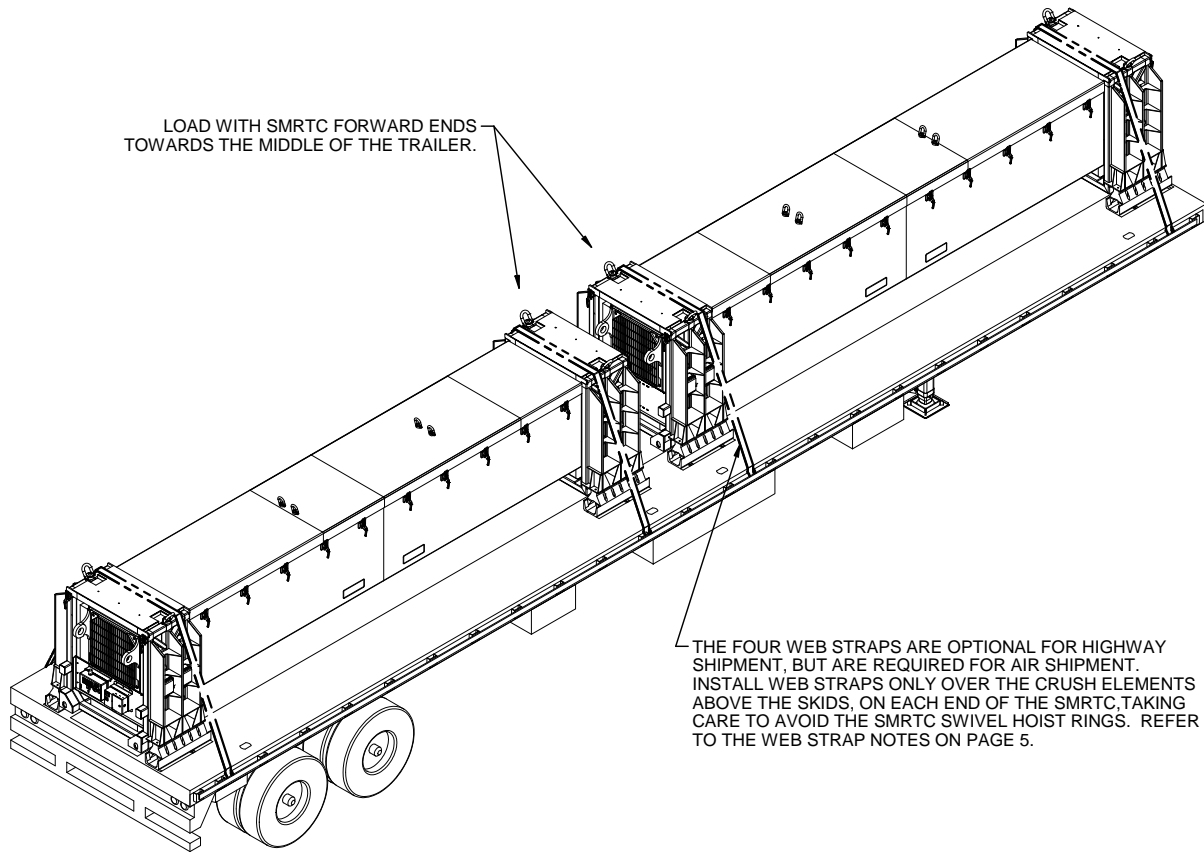
STRAP, WEB,
COMMERCIAL - - - - : WEB SLING AND TIEDOWN ASSOCIATION RECOMMENDED STANDARD SPECIFICATION FOR SYNTHETIC WEB TIEDOWNS, WSTDA-T-1, REVISED 2005.



INDICATES AFT
END OF CONTAINER

SMRTC CONTAINER DATA

GROSS WEIGHT - - - - - 13,500 LBS
 CUBE - - - - - 668.7 CU FT



ISOMETRIC VIEW

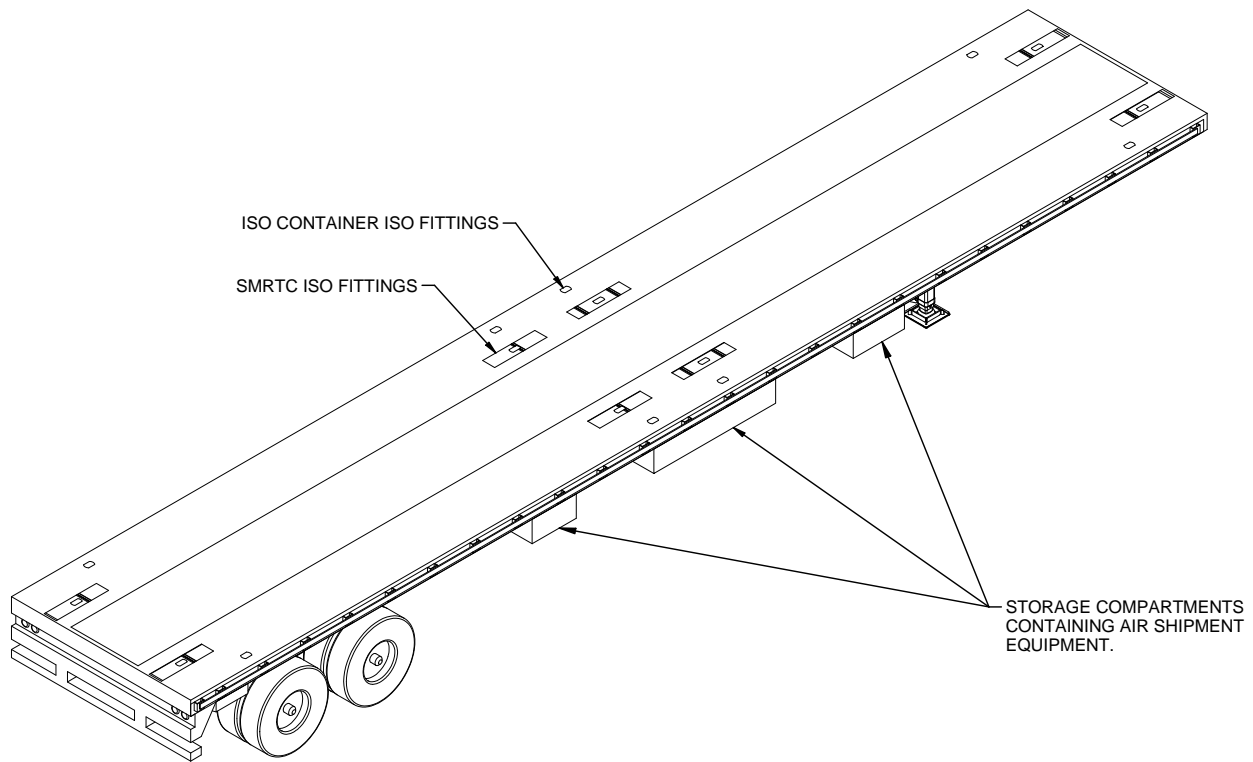
NOTE: THE SMRTC VENT KIT, P/N 1A68852-501, IS REQUIRED TO BE REMOVED FROM THE UNDER DECK STORAGE COMPARTMENT AND LOADED ON THE FLATBED TOP DECK WHEN A LOADED TRAILER IS TO BE SHIPPED BY AIR.

BILL OF MATERIAL

WEB STRAP ASSEMBLY	- - - AS REQD	- 41-1/2 LBS
ANTI-CHAFING MATERIAL	- - - AS REQD	- - - - - NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER	- - - - - 2	- - - - - 27,000 LBS
TOTAL WEIGHT		- - - - - 27,000 LBS



SPECIAL PROVISIONS FOR WEB STRAP TIEDOWN

LADING MAY BE SECURED TO A FLATBED TRAILER BY WEB STRAP ASSEMBLIES IN LIEU OF STEEL STRAPPING OR CHAINS AND LOAD BINDERS, PROVIDED THE FOLLOWING CONDITIONS ARE MET.

1. ONLY WEB STRAPS OF GOOD QUALITY WILL BE USED. ALL WEB STRAPS AND ASSOCIATED HARDWARE SHALL CONFORM TO THE WEB SLING & TIEDOWN ASSOCIATION RECOMMENDED STANDARD SPECIFICATION FOR SYNTHETIC WEB TIEDOWNS, WSTDA-T-1, REVISED 2005.
2. ALL WEB STRAP TIEDOWN ASSEMBLIES SHALL BE PERMANENTLY LABELED WITHIN 18" OF ONE END TO SHOW:
 - A. NAME OR TRADEMARK OF MANUFACTURER
 - B. WORKING LOAD LIMIT (WLL)
3. WEB STRAP ASSEMBLY MINIMUM BREAKING STRENGTH WILL BE AT LEAST THREE TIMES THE WLL MARKED ON THE STRAP.
4. THE TOTAL MINIMUM BREAKING STRENGTH (MBS) OF THE STRAPS USED TO RESTRAIN AMMUNITION ITEMS WILL BE AT LEAST 1-1/2 TIMES THE TOTAL WEIGHT OF THE ITEMS, WITH A MINIMUM OF TWO STRAPS POSITIONED OVER EACH LOAD UNIT ON A TRAILER. THE CARRIER SHALL PROVIDE WRITTEN PROOF OF THE MBS OF THE STRAPS TO THE SHIPPING ACTIVITY IF REQUESTED.
5. CARRIERS MUST COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS APPLICABLE TO CARGO RESTRAINT USING WEB STRAPS.
6. WHEN USING STRAPS AND WINCHES FOR CARGO RESTRAINT, THE STRAPS WILL BE TENSIONED UNTIL TIGHT WITHOUT CAUSING DAMAGE TO THE CARGO. ONLY WINCH BARS WILL BE USED FOR OPERATING THE STRAP WINCHES.
7. BEFORE AND DURING INSTALLATION, THE WEB STRAP ASSEMBLIES SHALL BE INSPECTED FOR DEFECTS. STRAPS HAVING ANY OF THE FOLLOWING DEFECTS WILL NOT BE USED FOR THE RESTRAINT OF ANY AMMUNITION LOAD, WITH THE EXCEPTION OF ONE WITH FRAYED ENDS. A STRAP HAVING FRAYED ENDS CAN BE USED IF THE FRAYED END IS TRIMMED AND MELTED WITH HEAT OR FLAME UNTIL ALL STRANDS ARE SEIZED.

(CONTINUED AT RIGHT)

(SPECIAL PROVISIONS FOR WEB STRAP TIEDOWN CONTINUED)

- A. STRAP ASSEMBLY HARDWARE: SHALL BE INSPECTED FOR BENT HOOKS, GOUGES, CORROSION, SIGNS OF REPAIR, BENT RATCHETS OR WINCHES, WEAR, OR ANY OTHER NOTICEABLE DEFECTS.
- B. STRAP WEBBING: SHALL BE INSPECTED FOR KNOTS, EXCESSIVE ABRASIVE WEAR, TEARS, PUNCTURES, CUTS, ACID OR CAUSTIC BURNS, BROKEN STITCHES, FRAYED ENDS, OIL OR GREASE SPOTS EXCEEDING 6 SQUARE INCHES, BLEACHING OF COLOR, INCREASED STIFFNESS, SPLICES, VISIBLE WEAR INDICATOR THREADS, OR ANY OTHER NOTICEABLE DEFECTS.
8. RATCHET HANDLES MUST BE IN THE LOCKED POSITION AND/OR WINCH LOCKING DEVICES MUST BE FULLY SEATED IN THE TEETH OF THE WINCH.
9. IF THE WINCHES BEING USED ARE THE REMOVABLE TYPE HAVING BOLTS FOR ATTACHMENT TO THE TRAILER, CARE MUST BE EXERCISED WHEN ATTACHING THE WINCHES TO THE TRAILER. IF EXCESSIVE FORCE IS EXERTED ON THE BOLT DURING TENSIONING, DEFORMATION OF THE WINCH BRACKET MAY OCCUR, AND SUBSEQUENTLY CAUSE FAILURE OF THE WINCH BRACKET DURING TRANSPORT. WINCHES MUST BE FASTENED TO THE TRAILER WITH A MINIMUM OF TWO BOLTS.
10. DRIVERS MUST BE INSTRUCTED TO PERIODICALLY CHECK THE TIGHTNESS OF THE WEB STRAP ASSEMBLIES AND RE-TIGHTEN, IF NECESSARY.
11. IF PROVIDED ON OR WITH THE WEB STRAP ASSEMBLIES, SCUFF SLEEVES/WEB PROTECTORS WILL BE USED WHEREVER THE STRAP PASSES OVER A SHARP CORNER OR IRREGULAR SURFACE. IF NOT PROVIDED, ANTI-CHAFING MATERIAL OF A SUITABLE THICKNESS WILL BE USED TO ENSURE THAT THE STRAP WEBBING IS NOT DAMAGED DURING TRANSPORT OF THE LOAD.
12. THE HARDWARE FITTING OF THE TIEDOWN ASSEMBLIES MUST BE ATTACHED TO THE TRAILER IN SUCH A MANNER THAT THEY WILL REMAIN IN PLACE IF SLACK DEVELOPS IN THE STRAP DURING TRANSPORT.

