

# APPENDIX 109

## UNITIZATION PROCEDURES FOR BOXED AMMUNITION AND COMPONENTS ON SKIDDED BASES

DISPENSER, AIRCRAFT, XMI30, PACKED 1 PER METAL  
DRUM, UNITIZED 12 DRUMS PER 41" X 60" SPECIAL  
TYPE II SKID BASE; DRUM SIZE 20" DIA X 20" H

SKIDDED UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION				WEIGHT (LBS)
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	
1095- 01-036-6886	—	—	—	—	—	768

NOTICE: THIS APPENDIX CANNOT STAND ALONE BUT MUST BE  
USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES  
DRAWING 19-48-4138-20PA1000.

REVISIONS				DRAWN BY <i>GRG/DAK</i>	FIELD ENG <i>WRF/blw</i>
				CHECKED <i>RSW</i>	LIAISON OFFICER <i>John Boyd</i>
APPROVED, U. S. ARMY ARMAMENT MATERIEL READINESS COMMAND					
			<i>Lawrence W. Kuster</i> <i>Daniel P. Feltz</i>		
			DRBAR - DRBAR - TRD		
APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)					
<i>John L. Boyd Jr.</i> U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL					
U. S. ARMY DARCOM DRAWING					
OCTOBER 1979					
CLASS	DIVISION	DRAWING	FILE		
19	48	4138/ 109	20PA 1000		

**DO NOT SCALE**

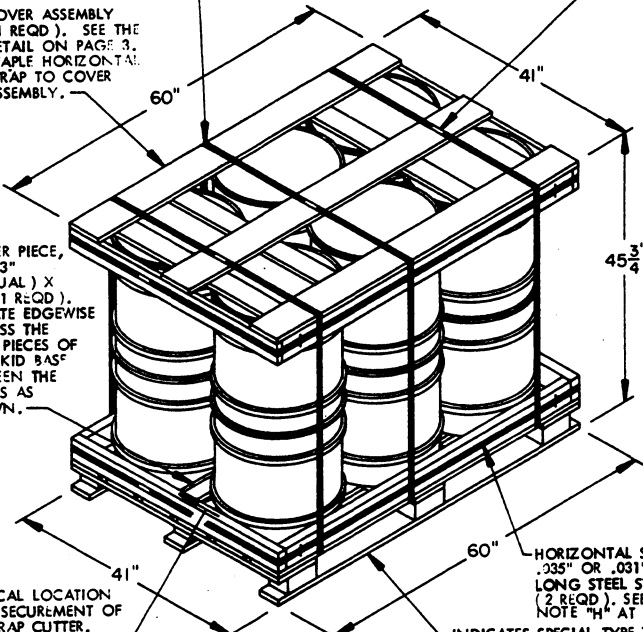
TIEDOWN STRAP, 3/4" X .035" OR .031" X 14'-8" LONG STEEL STRAPPING (3 REQD). SEE GENERAL NOTE "J" AT RIGHT.

SEAL FOR 3/4" STRAPPING (5 REQD, 1 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.

COVER ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 3. STAPLE HORIZONTAL STRAP TO COVER ASSEMBLY.

SPACER PIECE, 1" X 3" (ACTUAL) X 56" (1 REQD). LOCATE EDGEWISE ACROSS THE RISER PIECES OF THE SKID BASE BETWEEN THE DRUMS AS SHOWN.

TYPICAL LOCATION FOR SECUREMENT OF A STRAP CUTTER. SEE GENERAL NOTE "E" AT RIGHT.



**SKIDDED UNIT**  
SEE GENERAL NOTE "G" AT RIGHT.

12 DRUMS (DISPENSER; 1 PER DRUM) @ 53 LBS ----- 636 LBS (APPROX)  
DUNNAGE ----- 44 LBS  
SKID BASE ----- 88 LBS

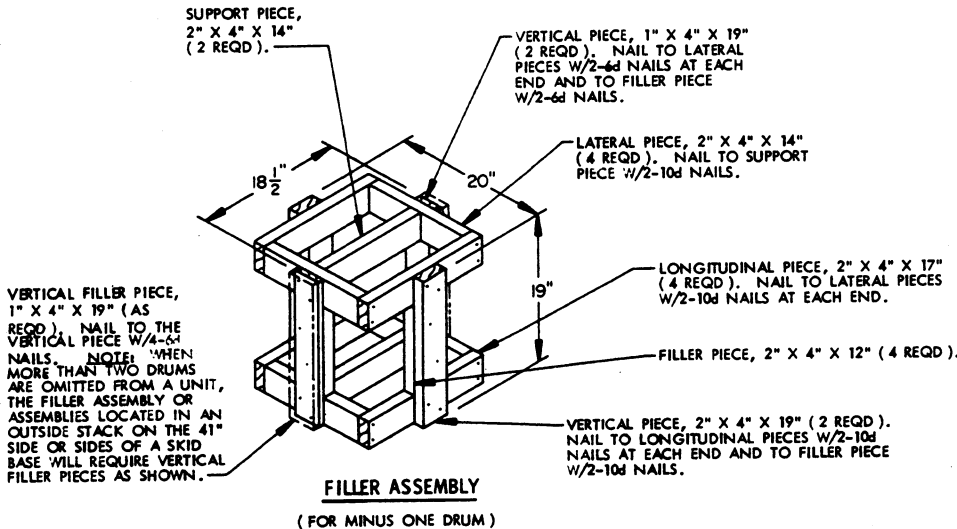
TOTAL WEIGHT ----- 768 LBS (APPROX)  
CUBE ----- 65.1 CU FT (APPROX)

**GENERAL NOTES**

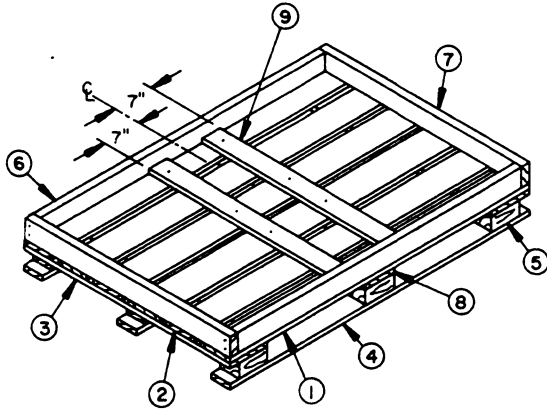
- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4138-20PA1000. TO PRODUCE AN APPROVED UNIT LOAD, ALL PERTINENT PROCEDURES, SPECIFICATIONS AND CRITERIA SET FORTH WITHIN THE BASIC DRAWING WILL APPLY TO THE PROCEDURES DELINEATED IN THIS APPENDIX. ANY EXCEPTIONS TO THE BASIC PROCEDURES ARE SPECIFIED IN THIS APPENDIX.
- B. THE UNITIZATION PROCEDURES DEPICTED IN THIS DRAWING WILL REQUIRE THE USE OF A "SPECIAL TYPE II SKID BASE". SPECIFICATIONS PERTAINING TO THE TYPE II SKID BASE DELINEATED IN THE BASIC PROCEDURES WILL BE FOLLOWED, AS APPLICABLE. SEE THE "SPECIAL TYPE II SKID BASE" DETAIL AND KEY NUMBERS ON PAGE 3.
- C. ONLY THE "SPECIAL TYPE II SKID BASE" WILL BE USED TO ASSEMBLE THIS UNIT. THE "W" DIMENSION WILL BE 60" AND THE "L" DIMENSION WILL BE 41". **CAUTION:** A TYPE I SKID BASE WILL NOT BE USED.
- D. THE FOLLOWING DARCOM DRAWINGS ARE APPLICABLE FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.  

CARLOADING -----	DRAWING 19-48-4123-5PA1003
TRUCKLOADING -----	DRAWING 19-48-4124-11PA1004
STORAGE -----	DRAWING 19-48-4125-1-2-14PA1003
- E. FOR METHOD OF SECURING A STRAP CUTTER TO THE SKIDDED UNIT, SEE DARCOM DRAWING 19-48-4127-20PT000.
- F. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING DISPENSERS WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON THE TITLE PAGE, PROVIDED THE DRUM PACK DOES NOT VARY FROM WHAT IS DELINEATED HEREIN.
- G. DIMENSIONS, CUBE AND WEIGHT OF A SKIDDED UNIT WILL VARY SLIGHTLY DEPENDING UPON THE ACTUAL DIMENSIONS OF THE DRUMS AND THE WEIGHT OF THE SPECIFIC ITEM BEING UNITIZED.
- H. INSTALL EACH HORIZONTAL STRAP TO ENIRCLE EACH DUNNAGE ASSEMBLY. HORIZONTAL STRAPS MUST BE TENSIONED AND SEALED PRIOR TO APPLICATION OF TIEDOWN STRAPS.
- J. INSTALL EACH TIEDOWN STRAP TO PASS UNDER THE TOP DECK BOARDS OF THE SKID BASE AND TO BE LOCATED AS SHOWN. TIEDOWN STRAPS WILL NOT BE APPLIED UNTIL THE HORIZONTAL STRAPS HAVE BEEN TENSIONED AND SEALED.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 3"	4.67	1.17
1" X 4"	29.75	9.92
1" X 6"	15.00	7.50
NAILS		POUNDS
6d (2")	58	0.34
SKID BASE, 41" X 60"	1 REQD	88 LBS
STEEL STRAPPING, 3/4"	79.66' REQD	5.69 LBS
SEAL FOR 3/4" STRAPPING	5 REQD	NIL
STAPLE	8 REQD	NIL



**FILLER ASSEMBLY**  
(FOR MINUS ONE DRUM)



**SPECIAL TYPE II SKID BASE**

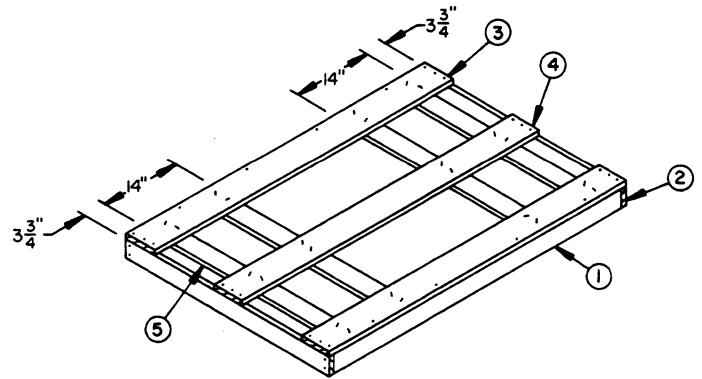
(SEE KEY NUMBERS AT RIGHT AND GENERAL NOTE "B" ON PAGE 2).

**KEY NUMBERS**

- ① TOP DECK BOARD, 1" X 6" X 60" (2 REQD.). NAIL TO LONGITUDINAL PIECE W/4-6d NAILS AND TO LATERAL PIECES W/2-6d NAILS AT EACH END. POSITION AS SHOWN AND NAIL THRU STRINGER PIECE INTO POST W/3 NAILS (TYPE II - STYLE 18) 3" TO 3-1/4" LONG X 0.135" DIA. AT EACH END USING A STAGGERED NAILING PATTERN.
- ② TOP DECK BOARD, 1" X 6" X 60" (4 REQD.). NAIL TO LATERAL PIECES W/2-6d NAILS AT EACH END. POSITION AS SHOWN AND NAIL TO STRINGER PIECES W/3 NAILS (TYPE II - STYLE 18) 1-1/2" LONG X 0.120" DIA. AT EACH JOINT USING A STAGGERED NAILING PATTERN. NOTE: USE 3" TO 3-1/4" X 0.135" DIA. NAILS ON CENTER BOARDS TO PENETRATE THE CENTER POST.
- ③ OUTSIDE STRINGER, 1" X 8" X 41" (2 REQD.). POSITION AS SHOWN.
- ④ RUNNER, 1" X 4" X 60" (3 REQD.). POSITION AS SHOWN AND NAIL TO POST W/4 NAILS (TYPE II - STYLE 18) 2-1/4" LONG X 0.120" DIA. AT EACH JOINT USING A STAGGERED NAILING PATTERN.
- ⑤ POST, 5-1/2" WIDE X 2-3/4" HIGH X 3-1/2" LONG (9 REQD.).
- ⑥ LONGITUDINAL PIECE, 2" X 4" X 57" (2 REQD.).
- ⑦ LATERAL PIECE, 2" X 4" X 41" (2 REQD.). NAIL TO THE LONGITUDINAL PIECES W/2-10d NAILS AT EACH END.
- ⑧ CENTER STRINGER, 1" X 6" X 41" (1 REQD.).
- ⑨ RISER, 1" X 4" X 38" (2 REQD.). NAIL TO TOP DECK BOARDS W/1-6d NAIL AT EACH OF 4 JOINTS.

**KEY NUMBERS**

- ① LONGITUDINAL PIECE, 1" X 4" X 58-1/2" (2 REQD.).
- ② LATERAL PIECE, 1" X 4" X 41" (2 REQD.). NAIL TO LONGITUDINAL PIECES W/2-6d NAILS AT EACH END.
- ③ TIE PIECE, 1" X 6" X 60" (2 REQD.). NAIL TO THE LONGITUDINAL PIECE W/4-6d NAILS AND TO THE LATERAL PIECES W/3-6d NAILS AT EACH END.
- ④ TIE PIECE, 1" X 6" X 60" (1 REQD.). NAIL TO THE LATERAL PIECES W/3-6d NAILS AT EACH END.
- ⑤ FILLER PIECE, 1" X 4" X 39-1/2" (4 REQD.). NAIL TO THE TIE PIECES W/2-6d NAILS AT EACH JOINT AND CLINCH.



**COVER ASSEMBLY**

(SEE KEY NUMBERS AT LEFT)

