

LOADING AND BRACING PROCEDURES[⊕] FOR CONVENTIONAL AMMUNITION ITEMS IN/ON TACTICAL VEHICLES[⊕]

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- ⊕ THESE PROCEDURES EMPLOY WOOD DUNNAGE, NAILS, AND STEEL STRAPPING TO SECURE THE LADING. THE UNIVERSAL TIE-DOWN SYSTEM, WHICH CONSISTS OF WEB STRAP ASSEMBLIES AND TIE-DOWN FITTINGS OR ANCHOR DEVICES FOR VEHICLE CARGO BEDS, IS NOT USED WITHIN THIS DRAWING.

- ⊕ THE PROCEDURES DEPICTED WITHIN THIS DRAWING ARE FOR ON HIGHWAY USE ONLY.

DO NOT SCALE

REVISIONS				<small>DRAFTSMAN</small> <small>W.F. ELMST/DAK</small> <small>CHECKED</small> <small>GEG</small>	<small>PROJ. ENG.</small> <small>JDS/MIW</small> <small>LOG. ENGINE OFFICE</small> <small>W.F. ELMST</small>
1	JAN 81	<small>MIW</small> <small>W.F.E.</small> <small>W.F.E.</small>	<small>D.C. Feltes</small> <small>John Byard</small> <small>I. S. Byard</small> <small>W.F. Elmst</small>	<small>APPROVED, U. S. ARMY ARMAMENT MATERIEL READINESS COMMAND</small> <small>D.C. Feltes</small>	
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GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1.
- B. THIS DRAWING COVERS PROCEDURES APPLICABLE TO THE TRANSPORT OF CONVENTIONAL AMMUNITION ITEMS IN/ON TACTICAL TYPE VEHICLES FOR ON HIGHWAY USE ONLY. SEE PAGES 4 AND 5 FOR TYPICAL LADING ITEMS.
- C. ALL LOADS SHOWN HEREIN ARE TYPICAL, HOWEVER, THE PROCEDURES ARE ADAPTABLE TO THE SIZE OF THE UNIT TO BE TRANSPORTED. THE NUMBER OF UNITS POSITIONED ACROSS THE VEHICLE WIDTH AND THE NUMBER OF UNITS POSITIONED WITHIN THE VEHICLE LENGTH WILL BE DEPENDENT UPON THE UNIT LENGTH OR WIDTH. ALSO, THE TOTAL NUMBER OF UNITS IN/ON A VEHICLE MAY DEPEND UPON THE WEIGHT OF THE UNIT. COMBINATIONS OF ITEMS SHOWN MAY BE TRANSPORTED.
- D. OTHER TYPES OF LADING ITEMS MAY BE TRANSPORTED WITH THOSE SHOWN, HOWEVER, THE TOTAL LOAD MUST BE COMPATIBLE AND THE OTHER LADING ITEMS MUST BE BLOCKED AND BRACED TO EQUAL THE BLOCKING AND BRACING SPECIFIED HEREIN.
- E. WHEN REFERRING TO THE PALLET UNIT LENGTH OR UNIT WIDTH, THE 40" OR 35" DIMENSION OF THE PALLET BASE CONSTITUTES THE PALLET UNIT LENGTH AND THE 48" OR 45 1/2" DIMENSION CONSTITUTES THE PALLET UNIT WIDTH. WHEN REFERRING TO THE SKIDDED UNIT LENGTH OR UNIT WIDTH, THE LENGTH OF THE BOXES CONSTITUTES THE WIDTH OF THE SKIDDED UNIT. SEE THE TYPICAL UNIT DETAILS ON PAGES 4 AND 5.
- F. BECAUSE OF THE FACT THAT ALL THE LOADS SHOWN HEREIN ARE TYPICAL, IT IS MOST LIKELY THAT THE ACTUAL QUANTITY TO BE TRANSPORTED WILL NOT BE DEPICTED IN ANY OF THE LADING PROCEDURES HEREIN. A LOAD PLAN SHOULD BE DEVELOPED WHICH WILL BE THE MOST EFFICIENT AS TO THE AMOUNT OF DUNNAGE REQUIRED AND THE EASE OF LOADING, FOR THE QUANTITY OF ITEMS TO BE TRANSPORTED, USING THE LOAD PLANNING GUIDANCE CHARTS, ON PAGE 3, IN CONJUNCTION WITH THE DEPICTED LADING PROCEDURES. IN ORDER TO MAINTAIN SIMILARITY FROM ONE LOAD TO ANOTHER, INSTALLATIONS WHICH MAKE MULTIPLE SHIPMENTS OF THE SAME ITEM IN THE SAME TYPE OF VEHICLE, SHOULD MAKE AN ACTUAL PENCIL SKETCH OF THE LOAD. USING THE VARIOUS LOAD PATTERNS AND PROCEDURES SHOWN HEREIN AS GUIDANCE, THIS SKETCH WOULD DEPICT A COMBINATION WHICH WOULD BE MOST ADVANTAGEOUS AS FAR AS EASE OF LOADING AND EFFICIENT USE OF DUNNAGE IS CONCERNED FOR THE SPECIFIC ITEM THAT IS TO BE SHIPPED.
- G. THE NUMBER OF ITEMS TO BE TRANSPORTED MAY BE ADJUSTED TO FIT THE CAPACITY OF THE VEHICLE BEING LOADED OR THE QUANTITY TO BE SHIPPED. HOWEVER, THE APPROVED METHODS SPECIFIED HEREIN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING AND BRACING OF THE SPECIFIED ITEM.
- H. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 2" X 4" MATERIAL IS ACTUALLY 1-1/2" THICK BY 3-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.
- J. NOTICE: A STAGGERED NAILING PATTERN WILL BE USED WHEREVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES. ALSO, A STAGGERED NAILING PATTERN WILL BE USED WHEN DUNNAGE IS NAILED TO THE FLOOR OF THE TRANSPORTING VEHICLE, OR WHEN LAMINATING DUNNAGE. ADDITIONALLY, THE NAILING PATTERN FOR AN UPPER PIECE OF LAMINATED DUNNAGE WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL FOR THAT PIECE WILL NOT BE DRIVEN THROUGH, ONTO, OR RIGHT BESIDE A NAIL IN A LOWER PIECE.

CAUTION: NAILING THROUGH ANY PORTION OF AMMUNITION PACKAGES AS A MEANS TO SUPPORT THE BRACING OR ANY TYPE OF DUNNAGE IS PROHIBITED. ALL NAILING WILL BE WITHIN THE DUNNAGE OR INTO THE FLOOR OF A TRAILER, AS SPECIFIED HEREIN.
- K. PORTIONS OF THE VEHICLES, SUCH AS SIDEWALL AND END WALLS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- L. WHEN STEEL STRAPPING IS SEALED AT AN END-OVER-END LAP JOINT, A MINIMUM OF TWO (2) SEALS, BUTTED TOGETHER, WITH TWO (2) PAIRS OF CRIMPS PER SEAL, MUST BE USED.
- M. WHEN TRANSPORTING AMMUNITION ITEMS ON THE M871 AND/OR THE M872 SEMITRAILER IT WILL BE NECESSARY TO COVER THE HOLES IN THE SIDE FRAMES WITH THE HOLE COVERING PLATES WHICH ARE PROVIDED WITH THE VEHICLE. AFTER ALL SIDE PANELS AND REAR PANELS ARE IN POSITION THE STAKES MUST BE SECURELY "PINNED" OR "WIRE-TIED" TO THE STAKE POCKET TO PREVENT VERTICAL DISPLACEMENT DURING TRANSPORT. ALSO, THE SIDE PANELS MUST BE SECURED AT THE TOP WITH THE CROSS CHAINS WHICH ARE PROVIDED WITH THE VEHICLE. SEE "ALTERNATIVE HOLE COVERING METHODS" ON PAGE 59.
- N. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO THE DEPICTED TYPICAL LOADS.

MATERIAL SPECIFICATIONS

LUMBER -----	SEE TM 743-200-1, DUNNAGE LUMBER, FED SPEC MM-L-751.
NAILS -----	FED SPEC FF-N-105, COMMON.
STRAPPING, STEEL -----	CLASS 1, TYPE I OR II, HEAVY DUTY, FINISH A, B, (GRADE 2), OR C; FED SPEC QQ-S-781.
STRAP SEALS -----	TYPE D, STYLE I, II, OR III, CLASS H, FED SPEC QQ-S-781.
WIRE -----	FED SPEC QQ-W-461.

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TYPICAL ITEMS IN/ON VARIOUS TYPES OF TACTICAL VEHICLES

SEMITRAILER, 12 TON M127, 22-1/2 TON M871, AND/OR 34 TON M872 (TYPICAL):

BOXED AMMUNITION AND COMPONENTS ON A 40" LONG BY 48" WIDE PALLET -----	6-19
BOXED AMMUNITION AND COMPONENTS ON A 35" LONG BY 45-1/2" WIDE PALLET -----	6-19
BOXED AMMUNITION AND COMPONENTS ON SKIDDED BASES - PROPELLING CHARGES ON A 40" LONG BY 48" WIDE PALLET -----	6-19
COMPLETE ROUNDS ON A 40" LONG BY 48" WIDE PALLET -----	6-19
SEPARATE LOADING PROJECTILES, 155MM, 8/PALLET -----	20-29
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SEPARATE LOADING PROJECTILES, 175MM, 20/PALLET -----	6-19
SEPARATE LOADING PROJECTILES, 8", 3/PALLET -----	20-29
SEPARATE LOADING PROJECTILES, 8", 6/PALLET -----	20-29

TRUCK, CARGO, 2-1/2 AND/OR 5 TON (TYPICAL):

BOXED AMMUNITION AND COMPONENTS ON A 40" LONG BY 48" WIDE PALLET -----	30-43
BOXED AMMUNITION AND COMPONENTS ON A 35" LONG BY 45-1/2" WIDE PALLET -----	30-43
BOXED AMMUNITION AND COMPONENTS ON SKIDDED BASES -----	30-43
PROPELLING CHARGES ON A 40" LONG BY 48" WIDE PALLET -----	30-43
COMPLETE ROUNDS ON A 40" LONG BY 48" WIDE PALLET -----	30-43
SEPARATE LOADING PROJECTILES, 155MM, 8/PALLET -----	44-47
SEPARATE LOADING PROJECTILES, 175MM, 6/PALLET -----	44-47
SEPARATE LOADING PROJECTILES, 175MM, 20/PALLET -----	30-43
SEPARATE LOADING PROJECTILES, 8", 3/PALLET -----	44-47
SEPARATE LOADING PROJECTILES, 8", 6/PALLET -----	44-47

TRUCK, CARGO, 8 TON, M520 (TYPICAL):

BOXED AMMUNITION AND COMPONENTS ON A 40" LONG BY 48" WIDE PALLET -----	48-51
BOXED AMMUNITION AND COMPONENTS ON A 35" LONG BY 45-1/2" WIDE PALLET -----	48-51
BOXED AMMUNITION AND COMPONENTS ON SKIDDED BASES -----	48-51
PROPELLING CHARGES ON A 40" LONG BY 48" WIDE PALLET -----	48-51
COMPLETE ROUNDS ON A 40" LONG BY 48" WIDE PALLET -----	48-51
SEPARATE LOADING PROJECTILES, 155MM, 8/PALLET -----	52-53
SEPARATE LOADING PROJECTILES, 175MM, 6/PALLET -----	52-53
SEPARATE LOADING PROJECTILES, 175MM, 20/PALLET -----	48-51
SEPARATE LOADING PROJECTILES, 8", 3/PALLET -----	52-53
SEPARATE LOADING PROJECTILES, 8", 6/PALLET -----	52-53

DETAILS -----

TRUCK, CARGO, 1-1/4 TON, M998 (HMMWV):

BOXED AMMUNITION AND COMPONENTS ON A 40" LONG BY 48" WIDE PALLET -----	60
BOXED AMMUNITION (UNPALLETIZED) -----	61

TRUCK, CARGO, 1-1/4 TON, M1008 (CUCV):

BOXED AMMUNITION AND COMPONENTS ON SKIDDED BASES -----	62-63
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TRUCK, CARGO, 10-TON, M977 AND/OR M985 (HEMTT):

SEPARATE LOADING PROJECTILES, 155MM, 8/PALLET -----	64-65
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SEMITRAILER, DROPSIDE, 22-1/2 TON, M871:

BOXED AMMUNITION AND COMPONENTS ON SKIDDED BASES -----	66
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NOTE: THE TACTICAL VEHICLES LISTED IN THE INDEX ABOVE AND SHOWN WITHIN THIS DRAWING WERE SELECTED AS TYPICAL ONLY. OTHER TYPES OF VEHICLES MAY BE USED IN LIEU OF THOSE SHOWN, BY USING THESE TYPICAL VEHICLES WITH TYPICAL LOADS, A LOAD PLAN MAY BE DEVELOPED FOR THE ACTUAL ITEM IN/ON THE ACTUAL VEHICLE. SEE GENERAL NOTES "C", "F", AND "G" ON THIS PAGE.

REVISIONS

REVISION NO. 1, DATED JANUARY 1981, CONSISTS OF:

1. ADDED PROCEDURES FOR SEMITRAILER, 22-1/2 TON, M871 AND SEMITRAILER, 34 TON, M872.
2. UPDATED GENERAL NOTES, MATERIAL SPECIFICATIONS, AND DRAWING FORMAT.

REVISION NO. 2, DATED JANUARY 1988, CONSISTS OF:

1. ADDING PROCEDURES FOR CARGO TRUCKS M998 (HMMWV), M1008 (CUCV), M977 AND/OR M985 (HEMTT), AND M871 DROPSIDE TRAILER.

CHART NO. 1

SKIDDED UNITS POSITIONED ACROSS THE VEHICLE WIDTH (SEE "NOTE (C)" BELOW)

TYPICAL VEHICLE	INSIDE VEHICLE WIDTH	NUMBER OF UNITS WIDE	DIMENSION OF SKIDDED UNITS WITH LENGTH ACROSS THE VEHICLE WIDTH	DIMENSION OF SKIDDED UNITS WITH WIDTH ACROSS THE VEHICLE WIDTH
SEMITRAILER STAKE, 12 TON, M127	7'-6"	2-WIDE 3-WIDE	25" TO 41-1/2" 25" TO 27-1/2"	27" TO 41-1/2" 27" TO 27-1/2"
SEMITRAILER 22-1/2 TON, M871	7'-5-1/2"	2-WIDE 3-WIDE	25" TO 43" 25" TO 28"	25" TO 43" 25" TO 28"
SEMITRAILER 34 TON, M872	7'-7"	2-WIDE 3-WIDE	25" TO 43-1/2" 25" TO 29"	25" TO 43-1/2" 25" TO 29"
TRUCK, CARGO, 2-1/2" OR 5 TON	7'-4"	2-WIDE 3-WIDE	25" TO 43-3/4" 25" TO 29-1/4"	27" TO 43-3/4" 27" TO 29-1/4"
TRUCK, CARGO, 8 TON, M520	8'-2-1/2"	2-WIDE 3-WIDE	25" TO 49" 25" TO 32-1/2"	27" TO 49" 27" TO 32-1/2"

NOTE (C) : THE SIZE OF THE SKIDDED UNITS MAY BE 25" TO 47" IN LENGTH AND 27" TO 97" IN WIDTH.

CHART NO. 2

PALLETIZED UNITS POSITIONED ACROSS THE VEHICLE WIDTH (SEE "NOTE (D)" BELOW.)

TYPICAL VEHICLE	INSIDE VEHICLE WIDTH	NUMBER OF UNITS WIDE	DIMENSION OF PALLETIZED UNITS WITH LENGTH ACROSS THE VEHICLE WIDTH	DIMENSION OF PALLETIZED UNITS WITH WIDTH ACROSS THE VEHICLE WIDTH
SEMITRAILER STAKE, 12 TON, M127	7'-6"	2-WIDE	35" TO 43"	NONE
SEMITRAILER 22-1/2 TON, M871	7'-5-1/2"	2-WIDE	35" TO 43"	NONE
SEMITRAILER 34 TON, M872	7'-7"	2-WIDE	35" TO 43"	NONE
TRUCK, CARGO, 2-1/2 OR 5 TON	7'-4"	2-WIDE	35" TO 43-3/4"	NONE
TRUCK, CARGO, 8 TON, M520	8'-2-1/2"	2-WIDE	35" TO 44"	45-1/2" TO 49"

NOTE (D) : THE MAXIMUM PALLETIZED UNIT SIZE FOR AMMUNITION ITEMS ON A 35" LONG BY 45-1/2" WIDE PALLET IS 39" LONG BY 51-1/2" WIDE. THE MAXIMUM PALLETIZED UNIT SIZE FOR AMMUNITION ITEMS ON A 40" LONG BY 48" WIDE PALLET IS 44" LONG BY 54" WIDE.

CHART NO. 3

FOR NAILED DOWN BLOCKING ON SEMITRAILERS

NUMBER OF TRIPLED BACK-UP CLEATS REQUIRED AT EACH END OF THE LOAD *	LENGTH OF BACKUPS	NUMBER OF NAILS REQUIRED IN EACH PIECE *	MAX WEIGHT OF THE LOAD
2	18"	5	9,000
3	18"	5	13,500
4	18"	5	18,000
5	18"	5	22,500
6	18"	5	27,000
2	24"	6	10,000
3	24"	6	15,500
4	24"	6	20,000
5	24"	6	25,500
6	24"	6	30,000
2	30"	8	15,000
3	30"	8	22,500
4	30"	8	30,000
5	30"	8	37,500
6	30"	8	45,000
2	36"	9	16,000
3	36"	9	24,000
4	36"	9	32,000
5	36"	9	40,000
6	36"	9	48,000
2	42"	10	18,000
3	42"	10	27,000
4	42"	10	36,000
5	42"	10	45,000
6	42"	10	54,000

* ALL BACKUPS ARE 2" X 6" MATERIAL (TRIPLED). THE FIRST PIECE WILL BE NAILED TO THE TRAILER FLOOR WITH 12d NAILS. THE SECOND AND THIRD PIECES WILL BE NAILED TO THE FIRST PIECE WITH 20d NAILS. THE NAILS MUST BE STAGGERED IN EACH PIECE TO AVOID HITTING A NAIL IN A LOWER PIECE.

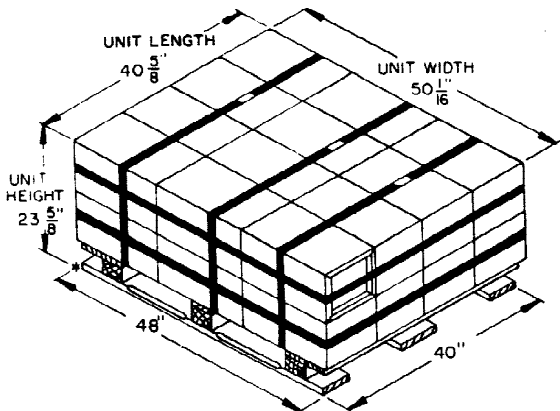
LOAD PLANNING GUIDANCE:

- THE CHARTS ON THIS PAGE ARE PRESENTED AS GUIDANCE IN THE SELECTION OF A LOAD PATTERN, AND IN DETERMINING THE QUANTITY OF UNITS WHICH CAN BE LOADED IN/ON A VEHICLE.
- CHART NO. 1 MAY BE USED IN SELECTING A LOAD PATTERN FOR SKIDDED UNITS IN/ON TACTICAL VEHICLES.
 - (A) WHEN LOADING 2-UNITS OR 3-UNITS WIDE ACROSS THE WIDTH OF A SEMITRAILER, AND USING NAILED DOWN SIDE BLOCKING AS SHOWN IN THE LOAD ON PAGE 6, THERE MUST BE ADEQUATE AVAILABLE SPACE REMAINING ON EACH SIDE OF THE LOAD TO POSITION THE SIDE BLOCKING PIECES AND NAIL IN PLACE.
 - (B) WHEN LOADING 2-UNITS OR 3-UNITS WIDE, ACROSS THE WIDTH OF A SEMITRAILER, AND USING A STAGGERED LOAD PATTERN WITH NAILED DOWN BLOCKING AS SHOWN IN THE LOAD ON PAGE 12, THERE MUST BE ADEQUATE AVAILABLE SPACE REMAINING ON THE SIDE OF THE LOAD TO POSITION THE SIDE BLOCKING PIECES AND NAIL IN PLACE.
 - (C) WHEN LOADING 2-UNITS OR 3-UNITS WIDE, ACROSS THE WIDTH OF A SEMITRAILER, AND USING "FLOATING" SIDE BLOCKING AT THE BOTTOM AND "ANTI-SWAY ASSEMBLIES" AT THE TOP AS SHOWN IN THE LOAD ON PAGE 16, THERE MUST BE ADEQUATE SPACE REMAINING ON EACH SIDE OF THE LOAD TO POSITION THE SIDE BLOCKING AND "ANTI-SWAY ASSEMBLIES".
 - (D) WHEN LOADING 2-UNITS OR 3-UNITS WIDE ACROSS THE WIDTH OF A CARGO TRUCK AS SHOWN IN THE LOAD ON PAGE 34, THERE MUST BE AT LEAST 1/2" EXCESS LATERAL SPACE REMAINING ACROSS THE VEHICLE WIDTH AFTER THE UNITS ARE POSITIONED.
- CHART NO. 2 MAY BE USED IN SELECTING A LOAD PATTERN FOR PALLETIZED UNITS IN/ON TACTICAL VEHICLES.
 - (A) WHEN LOADING 2-UNITS WIDE ACROSS THE WIDTH OF A SEMITRAILER FOLLOW STEPS (A), (B), AND (C) UNDER "LOAD PLANNING GUIDANCE" FOR SKIDDED UNITS, NUMBER 2, ABOVE.
 - (B) WHEN LOADING 2-UNITS WIDE ACROSS THE WIDTH OF A CARGO TRUCK FOLLOW STEP (D) UNDER "LOAD PLANNING GUIDANCE" FOR SKIDDED UNITS, NUMBER 2, ABOVE.
- CHART NO. 3 MAY BE USED AS GUIDANCE IN DETERMINING THE LENGTH AND QUANTITY OF BACK-UP CLEATS REQUIRED TO SECURE THE LOAD ON A SEMITRAILER.

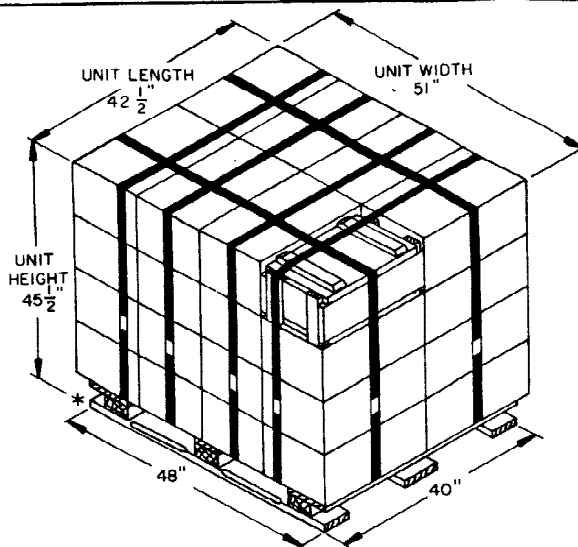
EXAMPLE OF LOAD PLANNING GUIDANCE.

PALLETIZED UNITS HAVING OVERALL DIMENSIONS OF 40-1/2" LONG BY 49-1/4" WIDE BY 55-3/4" HIGH AND WEIGHING 1,915 POUNDS ARE TO BE TRANSPORTED ON A SEMITRAILER, STAKE, 12 TON, M127.

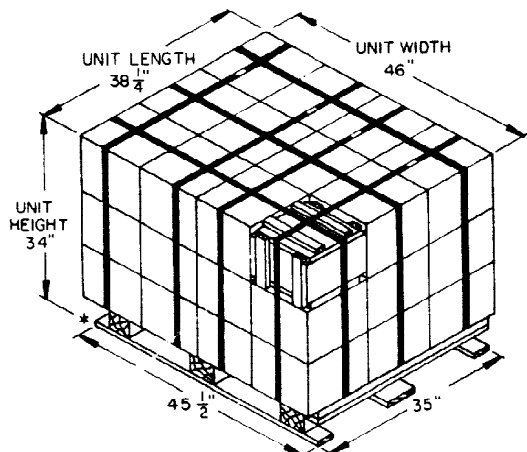
- CHART NO. 2, ON THIS PAGE, "PALLETIZED UNITS POSITIONED ACROSS THE VEHICLE WIDTH" INDICATES THAT THE PALLETIZED UNIT LENGTH OF 40-1/2" WOULD BE WITHIN THE 35" TO 43" RANGE AND TWO PALLETIZED UNITS COULD BE POSITIONED ACROSS THE VEHICLE WIDTH.
- THE SEMITRAILER HAS A LENGTH OF 28'-8" (344"). 344" DIVIDED BY THE PALLETIZED UNIT WIDTH OF 49-1/4" EQUALS 6. THIS INDICATES THAT THE LOAD WILL BE TWO PALLETIZED UNITS WIDE AND SIX PALLETIZED UNITS LONG FOR A TOTAL OF TWELVE PALLETIZED UNITS. TWELVE PALLETIZED UNITS WILL HAVE A TOTAL WEIGHT OF 22,980 POUNDS. THE EXCESS SPACE AT EACH END OF THE LOAD WILL BE 24" (APPROX).
- TO FIND THE NUMBER AND LENGTH OF BACK-UPS REQUIRED TO RETAIN A LOAD OF 22,980 POUNDS LOOK AT CHART NO. 3, ON THIS PAGE, IN THE RIGHT HAND COLUMN UNDER "MAX WEIGHT OF THE LOAD". A WEIGHT OF 22,980 POUNDS WOULD REQUIRE SIX (6) TRIPLED 18" LONG BACK-UPS AT EACH END, OR FIVE (5) TRIPLED 24" BACK-UPS AT EACH END, OR FOUR (4) TRIPLED 30" LONG BACK-UPS AT EACH END. SINCE THE LOAD ONLY HAS 24" (APPROX) OF EXCESS SPACE AT EACH END, THE 18" LONG BACK-UP WOULD BE THE BEST LENGTH TO USE. THEREFORE, SIX (6) TRIPLED 18" LONG BACK-UPS WILL BE POSITIONED AT EACH END OF THE LOAD.
- AFTER ACQUIRING THE INFORMATION IN STEPS 1, 2, AND 3, ABOVE, LOOK AT THE TYPICAL LOADS SHOWN ON AN M127, 12 TON SEMITRAILER ON PAGES 6 THROUGH 11 AND 18 THROUGH 27. READ THE SPECIAL NOTES FOR EACH LOAD AND SELECT A TYPICAL LOAD THAT WOULD BE SIMILAR TO THE LOAD TO BE TRANSPORTED. NOTE THAT THE PALLETIZED UNIT USED IN THIS EXAMPLE IS SHOWN IN THE LOAD ON PAGE 6. SEE GENERAL NOTE "F" ON PAGE 2.
- THE PROCEDURES IN THE EXAMPLE ABOVE ARE APPLICABLE TO ALL PALLETIZED AND SKIDDED UNITS BEING TRANSPORTED ON A SEMITRAILER.



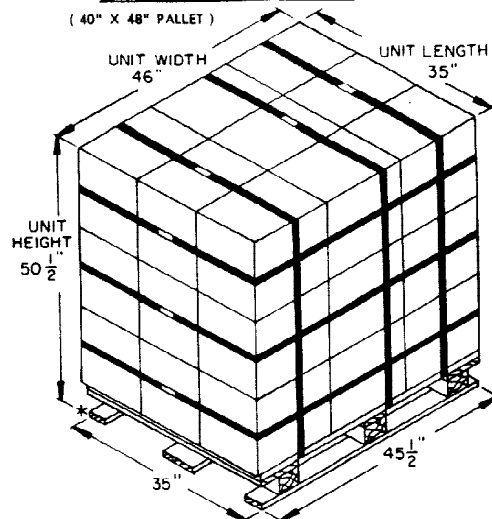
PALLETIZED UNIT OF BOXED AMMUNITION
(40" X 48" PALLET)



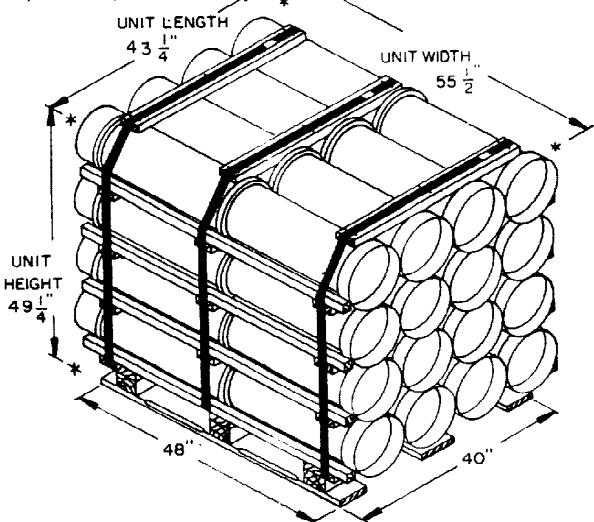
PALLETIZED UNIT OF BOXED AMMUNITION
(40" X 48" PALLET)



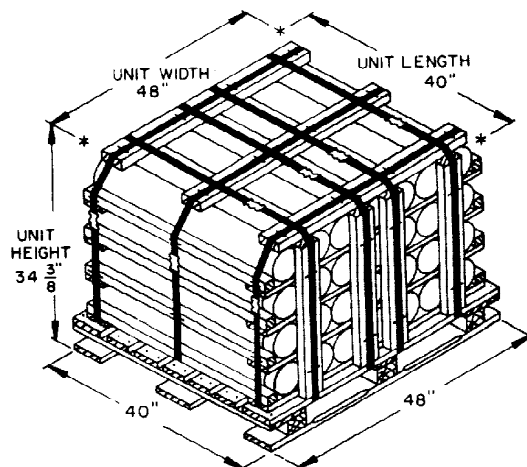
PALLETIZED UNIT OF BOXED AMMUNITION
(35" X 45-1/2" PALLET)



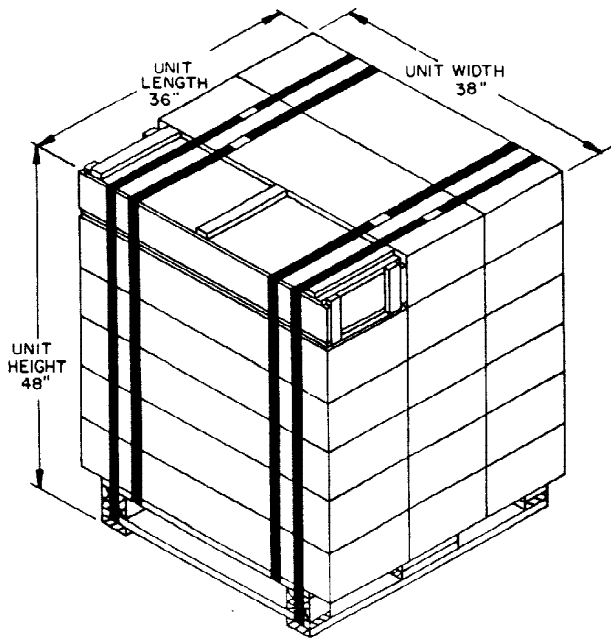
PALLETIZED UNIT OF BOXED AMMUNITION
(35" X 45-1/2" PALLET)



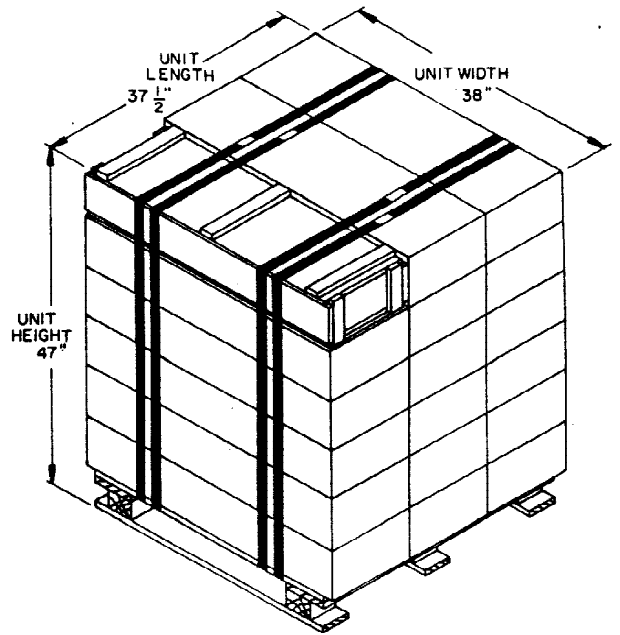
PALLETIZED UNIT OF PROPELLING CHARGES
(40" X 48" PALLET)



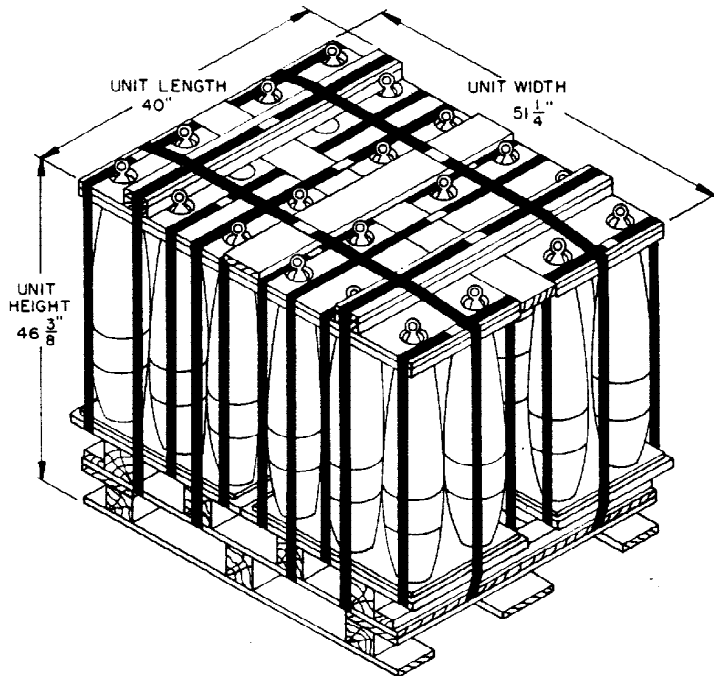
PALLETIZED UNIT OF COMPLETE ROUNDS
(40" X 48" PALLET)



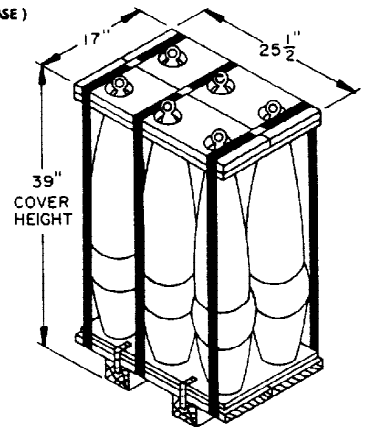
SKIDDED UNIT OF BOXED AMMUNITION
(TYPE I BASE)



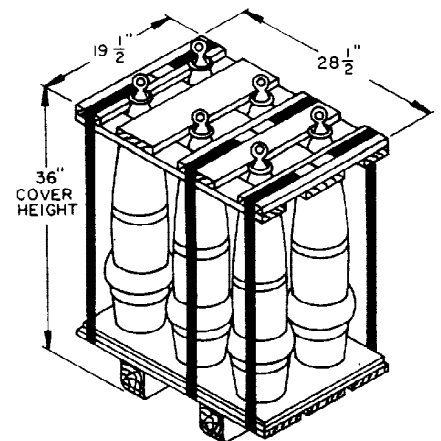
SKIDDED UNIT OF BOXED AMMUNITION
(TYPE II BASE)



175MM, 20/PALLET

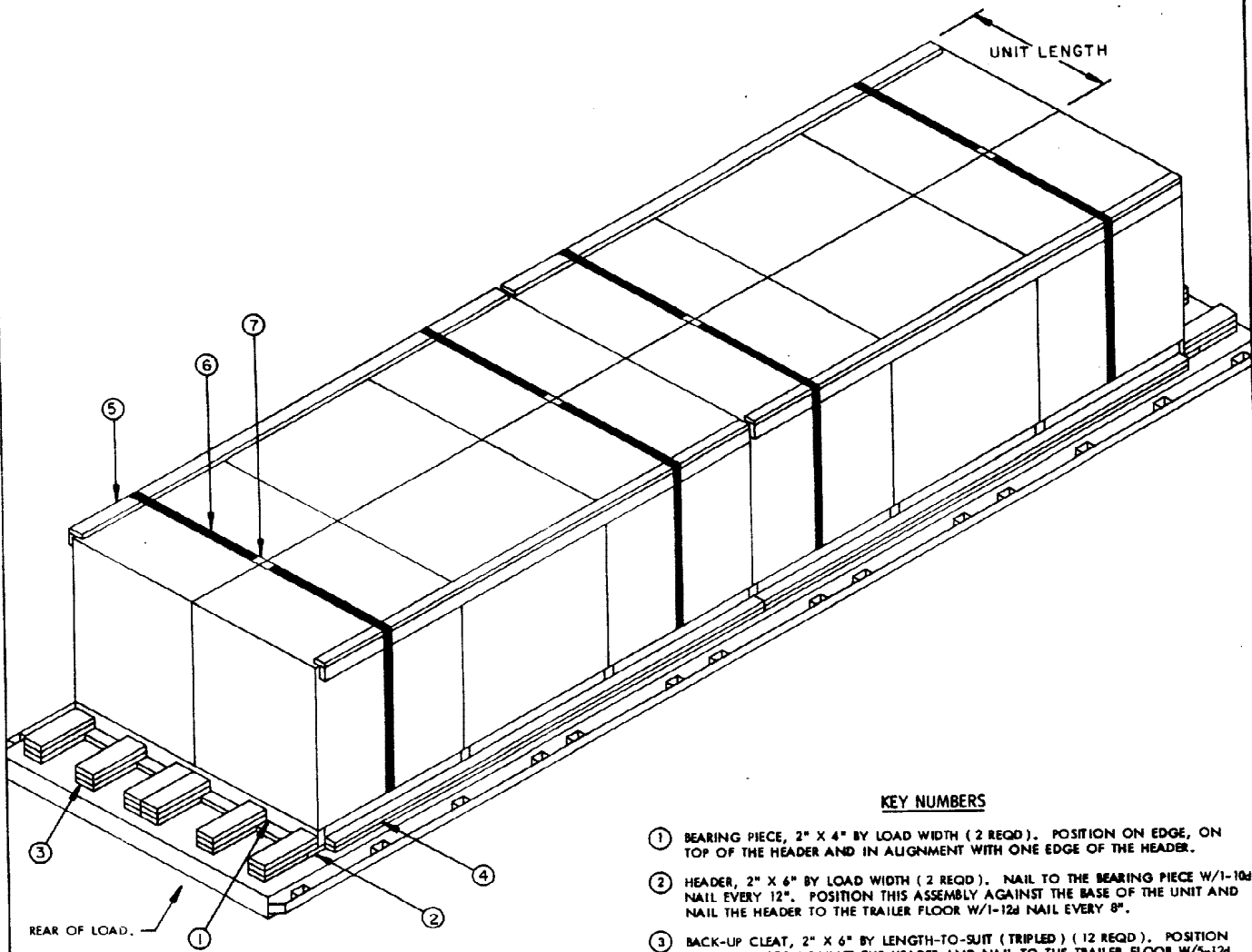


175MM, 6/PALLET



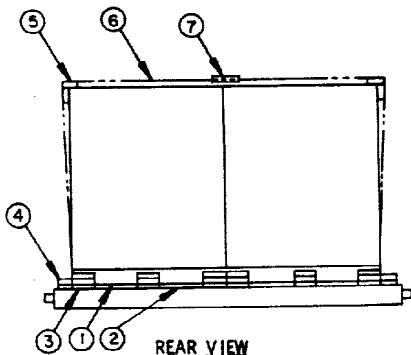
8", 6/PALLET

NOTE: THE ITEMS SHOWN ON PAGES 4 AND 5 DEPICT TYPICAL UNITS OF CONVENTIONAL AMMUNITION THAT MAY BE TRANSPORTED IN/ON TACTICAL VEHICLES. ALL ITEMS SHOWN WILL NOT BE DEPICTED IN THE TYPICAL LOAD VIEWS WITHIN THIS DRAWING.



ISOMETRIC VIEW

A PALLETIZED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED OR SKIDDED UNITS.



REAR VIEW

KEY NUMBERS

- ① BEARING PIECE, 2" X 4" BY LOAD WIDTH (2 REQD). POSITION ON EDGE, ON TOP OF THE HEADER AND IN ALIGNMENT WITH ONE EDGE OF THE HEADER.
- ② HEADER, 2" X 6" BY LOAD WIDTH (2 REQD). NAIL TO THE BEARING PIECE W/1-10d NAIL EVERY 12". POSITION THIS ASSEMBLY AGAINST THE BASE OF THE UNIT AND NAIL THE HEADER TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8".
- ③ BACK-UP CLEAT, 2" X 6" BY LENGTH-TO-SUIT (TRIPLED) (12 REQD). POSITION THE FIRST PIECE AGAINST THE HEADER AND NAIL TO THE TRAILER FLOOR W/5-12d NAILS. POSITION THE SECOND AND THIRD PIECES AGAINST THE BEARING PIECE AND NAIL TO THE FIRST PIECE W/5-20d NAILS IN EACH PIECE. NOTE: FOR THE LOAD SHOWN ON THIS PAGE THE FIRST PIECE IS 18" LONG AND THE SECOND AND THIRD PIECES ARE 22" LONG. SEE SPECIAL NOTES 7 AND 8 ON PAGE 7.
- ④ SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (AS REQD). POSITION THE FIRST PIECE AGAINST THE BASE OF THE UNIT AND NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 12". NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑤ ANTI-SWAY ASSEMBLY (4 REQD). SEE THE DETAIL ON PAGE 54 AND SPECIAL NOTES 3 AND 4 ON PAGE 7.
- ⑥ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 24'-0" LONG STEEL STRAPPING (4 REQD). INSTALL TO ENCIRCLE TWO (2) LATERALLY ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN. SEE SPECIAL NOTES 3 AND 4 ON PAGE 7.
- ⑦ SEAL FOR 1-1/4" STRAPPING (8 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.

SPECIAL NOTES.

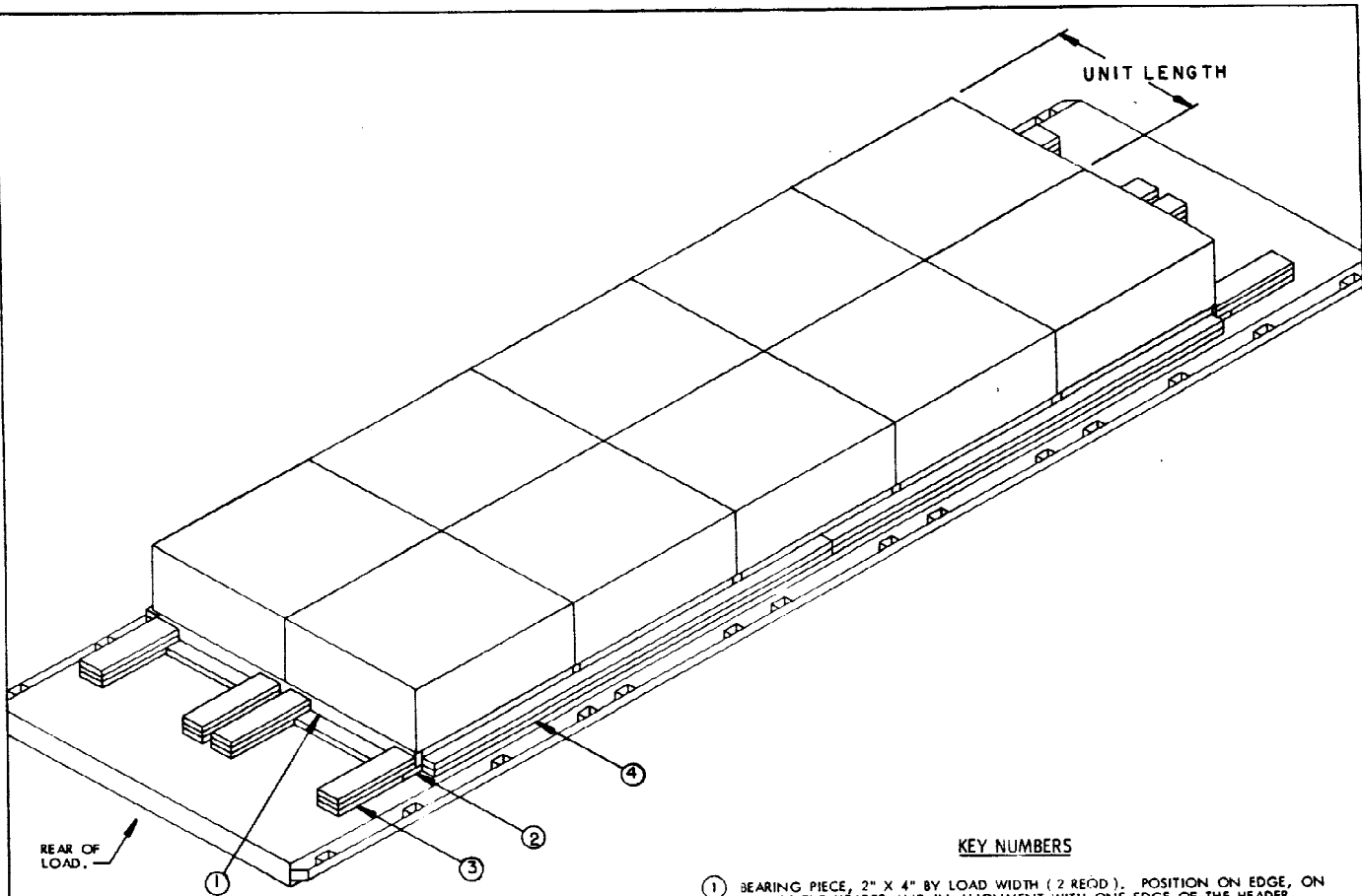
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED ON A SEMITRAILER, STAKE, 12 TON, M127, HAVING OVERALL DIMENSIONS OF 28'-8" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE 9 BELOW.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL 2-WIDE LOAD ON PAGE 6 HAS OVERALL DIMENSIONS OF 40-1/2" LONG BY 49-1/4" WIDE BY 55-3/4" HIGH AND A WEIGHT OF 1,915 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS AND SKIDDED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. ALL PALLETIZED UNITS WHICH ARE OVER 30" IN HEIGHT MUST BE UNITIZED WITH ANTI-SWAY STRAPS, SHOWN AS PIECE MARKED (6) ON PAGE 6 TOGETHER WITH "ANTI-SWAY ASSEMBLIES" SHOWN AS PIECE MARKED (5) ON PAGE 6. UNITS WHICH ARE LESS THAN 30" IN HEIGHT MAY BE LOADED AS SHOWN IN THE LOAD ON PAGE 8.
4. ALL SKIDDED UNITS WHICH HAVE A HEIGHT GREATER THAN TWO-THIRDS OF THEIR LENGTH OR WIDTH (WHICHEVER IS SMALLER) MUST BE UNITIZED WITH ANTI-SWAY STRAPS, SHOWN AS PIECE MARKED (6) ON PAGE 6 TOGETHER WITH "ANTI-SWAY ASSEMBLIES" SHOWN AS PIECE MARKED (5) ON PAGE 6. UNITS THAT HAVE A HEIGHT ONE-THIRD LESS THAN THEIR WIDTH OR LENGTH (WHICHEVER IS SMALLER) MAY BE LOADED AS SHOWN IN THE LOAD ON PAGE 8.
5. WHEN SHIPPING UNITS SUCH AS PROPELLING CHARGES AND COMPLETE ROUNDS, THE ANTI-SWAY ASSEMBLY, SHOWN AS PIECE MARKED (5) ON PAGE 6 CANNOT BE USED. A UNITIZING STRAP, SHOWN AS PIECE MARKED (6) ON PAGE 6, MUST BE PLACED AROUND EVERY TWO LATERALLY ADJACENT UNITS. PLACE ANTI-CHAFING NEUTRAL BARRIER MATERIAL UNDER THE STRAPPING AT ALL POINTS OF CONTACT WITH CONTAINERS AND SECURE TO PREVENT DISLODGEEMENT DURING AND AFTER STRAP APPLICATION.
6. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF TWO (2) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 6. A LOAD CAN BE REDUCED OR INCREASED BY ONE (1) UNIT BY USING THE PROCEDURES SHOWN ON PAGE 19.
7. THE LENGTH OF THE BACKUP PIECES, SHOWN AS PIECE MARKED (3) ON PAGE 6, AND THE NAILS REQUIRED WILL CHANGE PER DIFFERENT LOAD WEIGHTS. LONGER BACKUP PIECES THAN SHOWN MAY BE USED AND 2" X 4" MATERIAL MAY BE USED IN LIEU OF THE 2" X 6" MATERIAL. SEE "CHART NO. 9" ON PAGE 3 FOR GUIDANCE.
8. SEE "DETAIL A" ON PAGE 55 FOR POSITIONING OF THE BEARING PIECE, HEADER, AND BACK-UP CLEAT, AGAINST THE PALLET BASE OF SKIDDED BASE.
9. PROCEDURES FOR LOADING AN M871 OR M872 SEMITRAILER:
 - (A) SKIDDED UNITS WHICH WILL HAVE AT LEAST FOUR INCHES OF NAILABLE SPACE REMAINING ON EACH SIDE OF THE LOAD OR AMMUNITION ITEMS WHICH ARE PALLETIZED ON THE 35" X 45-1/2" PALLET AND HAVE A UNIT LENGTH OF 39" OR LESS MAY BE LOADED ON AN M872 SEMITRAILER OR THE REAR PORTION OF A M871 SEMITRAILER, USING THE SAME PROCEDURES SHOWN IN THE LOAD ON PAGE 6. FOR ALTERNATIVE LOADING PROCEDURES, SEE PAGES 12 THROUGH 17. SEE GENERAL NOTE "M" ON PAGE 2.
 - (B) SKIDDED UNITS WHICH DO NOT MEET THE REQUIREMENTS IN (A) ABOVE AND PALLETIZED UNITS HAVING A LENGTH GREATER THAN 39" MUST BE LOADED AS SHOWN ON PAGES 12 THROUGH 17.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	206	138
2" X 6"	76	76
NAILS	NO. REQD	POUNDS
10d (3")	86	1-1/2
12d (3-1/4")	180	3
20d (4")	120	4-1/2
STEEL STRAPPING, 1-1/4" X .035" ----- 96' REQD -----		14 LBS
SEAL FOR 1-1/4" STRAPPING ----- 8 REQD -----		NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNIT -----	12 -----	22,980 LBS
DUNNAGE -----		451 LBS
TOTAL WEIGHT -----		23,431 LBS

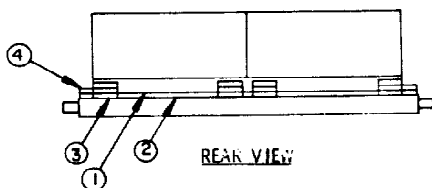


ISOMETRIC VIEW

A PALLETIZED UNIT IS DEPICTED, HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED OR SKIDDED UNITS. **CAUTION:** SEE SPECIAL NOTE 3 ON PAGE 9.

KEY NUMBERS

- ① BEARING PIECE, 2" X 4" BY LOAD WIDTH (2 REQ'D). POSITION ON EDGE, ON TOP OF THE HEADER AND IN ALIGNMENT WITH ONE EDGE OF THE HEADER.
- ② HEADER, 2" X 6" BY LOAD WIDTH (2 REQ'D). NAIL TO THE BEARING PIECE W/1-10d NAIL EVERY 12". POSITION THIS ASSEMBLY AGAINST THE BASE OF THE UNIT AND NAIL THE HEADER TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8".
- ③ BACK-UP CLEAR, 2" X 6" BY LENGTH-TO-SUIT (TRIPLED) (8 REQ'D). POSITION THE FIRST PIECE AGAINST THE HEADER AND NAIL TO THE TRAILER FLOOR W/6-12d NAILS. POSITION THE SECOND AND THIRD PIECES AGAINST THE BEARING PIECE AND NAIL TO THE FIRST PIECE W/6-20d NAILS IN EACH PIECE. NOTE: FOR THE LOAD SHOWN ON THIS PAGE THE FIRST PIECE IS 24" LONG AND THE SECOND AND THIRD PIECES ARE 28" LONG. SEE SPECIAL NOTES 5 AND 6 ON PAGE 9.
- ④ SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (AS REQ'D). POSITION THE FIRST PIECE AGAINST THE BASE OF THE UNIT AND NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 12". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER.



SPECIAL NOTES:

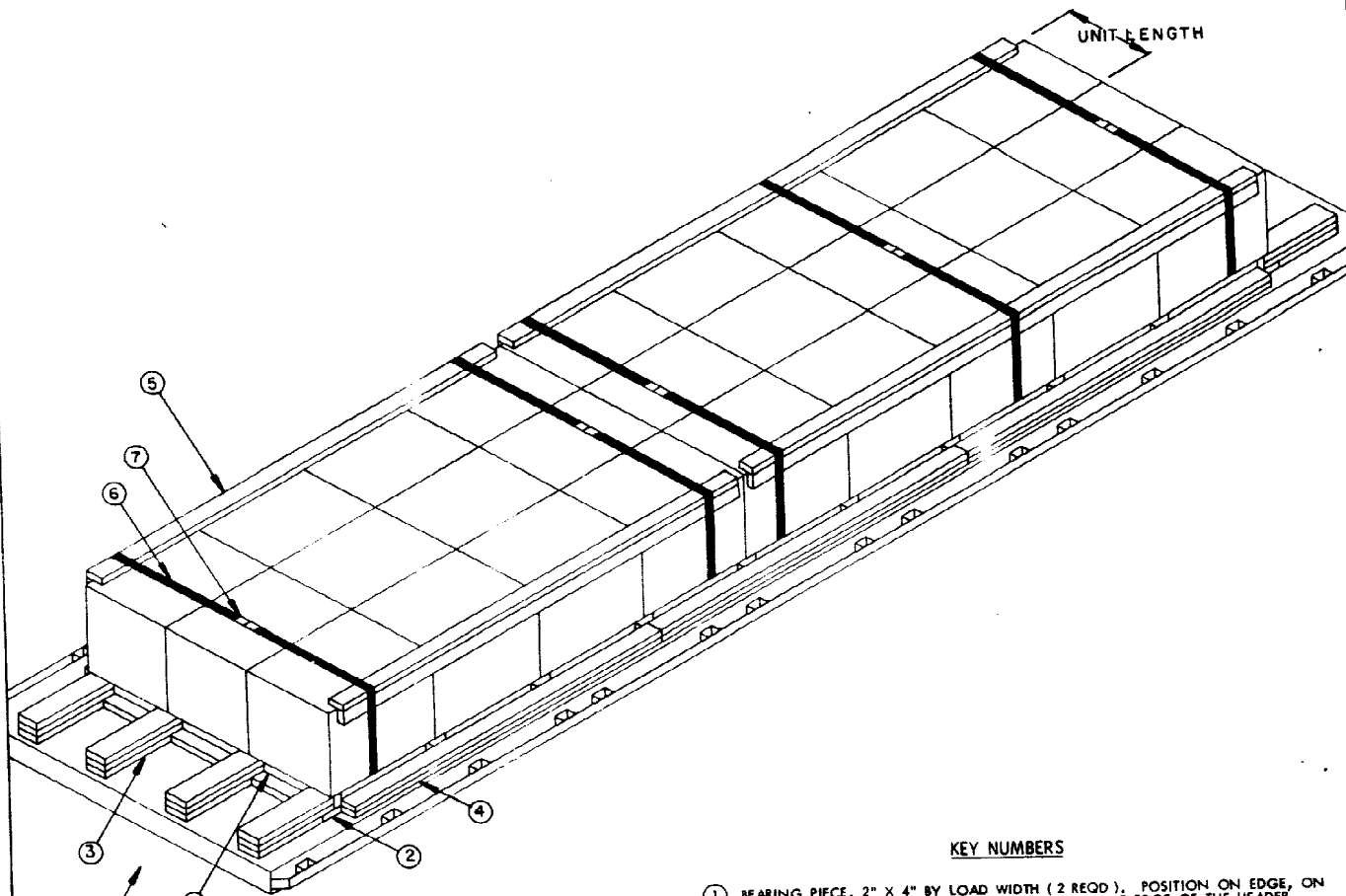
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED ON A SEMITRAILER, STAKE, 12 TON, M127, HAVING OVERALL DIMENSIONS OF 28'-8" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE 8 BELOW.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL 2-WIDE LOAD ON PAGE 8 HAS OVERALL DIMENSIONS OF 40-5/8" LONG BY 50-1/16" WIDE BY 23-5/8" HIGH AND A WEIGHT OF 1,780 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS AND SKIDDED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2 AND SPECIAL NOTE 3 ON THIS PAGE.
3. THE PROCEDURES SHOWN ON PAGE 8 ARE ONLY FOR PALLETIZED UNITS WHICH HAVE A HEIGHT LESS THAN 30" OR SKIDDED UNITS WHICH HAVE A HEIGHT ONE-THIRD LESS THAN THEIR WIDTH OR LENGTH (WHICHEVER IS SMALLER). FOR HIGHER UNITS SEE THE LOADS SHOWN ON PAGES 6 AND 10.
4. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF TWO (2) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 8. A LOAD CAN BE REDUCED OR INCREASED BY ONE (1) UNIT BY USING THE PROCEDURES SHOWN ON PAGE 19.
5. THE LENGTH OF THE BACKUP PIECES, SHOWN AS PIECE MARKED (3) ON PAGE 6, AND THE NAILS REQUIRED WILL CHANGE PER DIFFERENT LOAD WEIGHTS. LONGER BACKUP PIECES THAN SHOWN MAY BE USED AND 2" X 4" MATERIAL MAY BE USED IN LIEU OF THE 2" X 6" MATERIAL. SEE "CHART NO. 3" ON PAGE 3 FOR GUIDANCE.
6. SEE "DETAIL A" ON PAGE 55 FOR POSITIONING OF THE BEARING PIECE, HEADER, AND BACK-UP CLEAT, AGAINST THE PALLET BASE OR SKIDDED BASE.
7. SEE THE "TYPICAL LADING ITEMS" ON PAGE 4 FOR A DETAIL VIEW OF THE PALLETIZED UNIT, SHOWN IN THE LOAD ON PAGE 8.
8. PROCEDURES FOR LOADING AN M871 OR M872 SEMITRAILER:
 - (A.) SKIDDED UNITS WHICH WILL HAVE AT LEAST FOUR INCHES OF NAILABLE SPACE REMAINING ON EACH SIDE OF THE LOAD OR AMMUNITION ITEMS WHICH ARE PALLETIZED ON THE 35" X 45-1/2" PALLET AND HAVE A UNIT LENGTH OF 39" OR LESS MAY BE LOADED ON AN M872 SEMITRAILER OR THE REAR PORTION OF A M871 SEMITRAILER, USING THE SAME PROCEDURES SHOWN IN THE LOAD ON PAGE 8. FOR ALTERNATIVE LOADING PROCEDURES SEE PAGES 12 THROUGH 17. SEE GENERAL NOTE "M" ON PAGE 2.
 - (B.) SKIDDED UNITS WHICH DO NOT MEET THE REQUIREMENTS IN (A) ABOVE AND PALLETIZED UNITS HAVING A LENGTH GREATER THAN 39" MUST BE LOADED AS SHOWN ON PAGE 12 THROUGH 17.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	94	63
2" X 6"	67	67
NAILS	NO. REQD	POUNDS
10d (3")	14	1/4
12d (3-1/4")	152	2-3/4
20d (4")	96	3-1/2

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNIT -----	10 -----	17,800 LBS
DUNNAGE -----	-----	267 LBS
TOTAL WEIGHT -----	-----	18,067 LBS

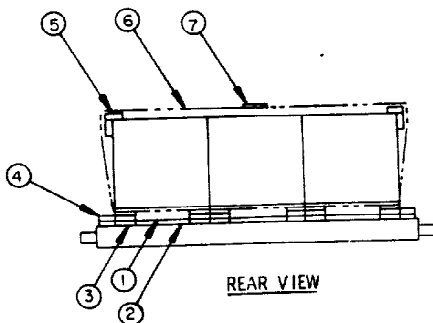


ISOMETRIC VIEW

THE LOAD PROCEDURES DEPICTED ARE APPLICABLE TO SKIDDED UNITS ONLY.

KEY NUMBERS

- ① BEARING PIECE, 2" X 4" BY LOAD WIDTH (2 REQD). POSITION ON EDGE, ON TOP OF THE HEADER AND IN ALIGNMENT WITH ONE EDGE OF THE HEADER.
- ② HEADER, 2" X 6" BY LOAD WIDTH (2 REQD). NAIL TO THE BEARING PIECE W/1-10d NAIL EVERY 12". POSITION THIS ASSEMBLY AGAINST THE BASE OF THE UNIT AND NAIL THE HEADER TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8".
- ③ BACK-UP CLEAT, 2" X 6" BY LENGTH-TO-SUIT (TRIPLED) (8 REQD). POSITION THE FIRST PIECE AGAINST THE HEADER AND NAIL TO THE TRAILER FLOOR W/6-12d NAILS. POSITION THE SECOND AND THIRD PIECES AGAINST THE BEARING PIECE AND NAIL TO THE FIRST PIECE W/6-20d NAILS IN EACH PIECE. NOTE: FOR THE LOAD SHOWN ON THIS PAGE THE FIRST PIECE IS 24" LONG AND THE SECOND AND THIRD PIECES ARE 28" LONG. SEE SPECIAL NOTES 5 AND 6 ON PAGE 11.
- ④ SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (AS REQD). POSITION THE FIRST PIECE AGAINST THE BASE OF THE UNIT AND NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 12". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER.
- ⑤ ANTI-SWAY ASSEMBLY (4 REQD). SEE THE DETAIL ON PAGE 54 AND SPECIAL NOTE 3 ON PAGE 11.
- ⑥ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 20'-0" LONG STEEL STRAPPING (5 REQD). INSTALL TO ENIRCLE THREE (3) LATERALLY ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN.
- ⑦ SEAL FOR 1-1/4" STRAPPING (10 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



REAR VIEW

SPECIAL NOTES:

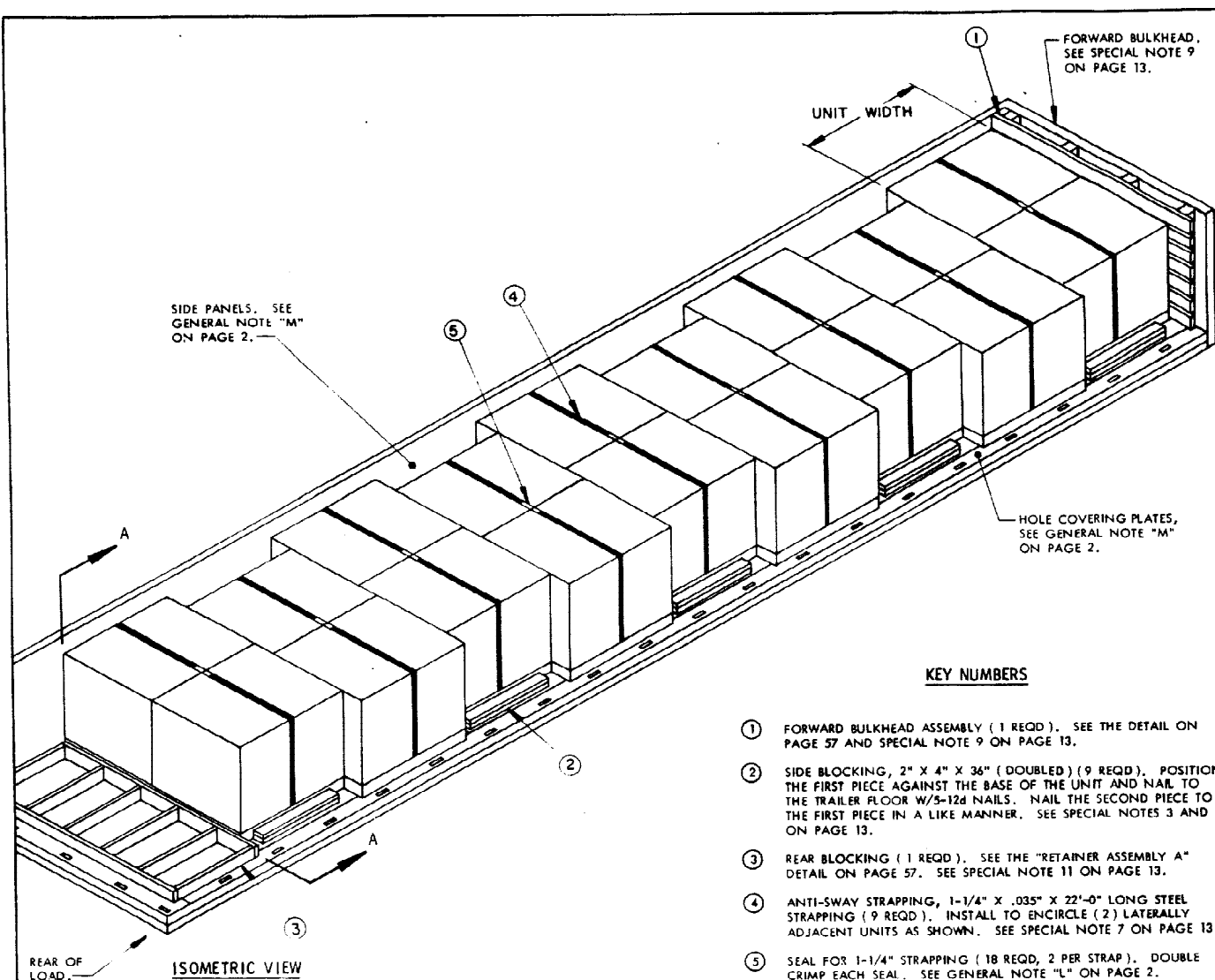
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A SKIDDED BASE IS SHOWN LOADED ON A SEMITRAILER, STAKE, 12 TON, M127; HAVING OVERALL DIMENSIONS OF 28'-8" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE 7 BELOW.
2. THE SKIDDED UNIT SHOWN IN THE TYPICAL 3-WIDE LOAD ON PAGE 10 HAS OVERALL DIMENSIONS OF 25" LONG BY 32" WIDE BY 29" HIGH AND A WEIGHT OF 720 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR SKIDDED UNITS OF OTHER DIMENSIONS. REFER TO "CHART NO. 1" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. ALL SKIDDED UNITS WHICH HAVE A HEIGHT GREATER THAN TWO-THIRDS OF THEIR LENGTH OR WIDTH (WHICHEVER IS SMALLER) MUST BE UNITIZED WITH ANTI-SWAY STRAPS, SHOWN AS PIECE MARKED (6) ON PAGE 10 TOGETHER WITH "ANTI-SWAY ASSEMBLIES" SHOWN AS PIECE MARKED (5) ON PAGE 10. UNITS THAT HAVE A HEIGHT ONE-THIRD LESS THAN THEIR WIDTH OR LENGTH (WHICHEVER IS SMALLER) MAY BE LOADED AS SHOWN IN THE LOAD ON PAGE 8.
4. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF THREE (3) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 10. A LOAD CAN BE REDUCED OR INCREASED BY ONE (1) UNIT BY USING THE PROCEDURES SHOWN ON PAGE 19.
5. THE LENGTH OF THE BACKUP PIECES, SHOWN AS PIECE MARKED (3) ON PAGE 10, AND THE NAILS REQUIRED WILL CHANGE PER DIFFERENT LOAD WEIGHTS. LONGER BACKUP PIECES THAN SHOWN MAY BE USED AND 2" X 4" MATERIAL MAY BE USED IN LIEU OF THE 2" X 6" MATERIAL. SEE "CHART NO. 3" ON PAGE 3 FOR GUIDANCE.
6. SEE "DETAIL A" ON PAGE 55 FOR POSITIONING OF THE BEARING PIECE, HEADER, AND BACK-UP CLEAT, AGAINST THE PALLET BASE OR SKIDDED BASE.
7. PROCEDURES FOR LOADING AN M871 OR M872 SEMITRAILER:
 - (A) SKIDDED UNITS WHICH WILL HAVE AT LEAST FOUR INCHES OF NAILABLE SPACE REMAINING ON EACH SIDE OF THE LOAD MAY BE LOADED ON AN M872 SEMITRAILER OR THE REAR PORTION OF A M871 SEMITRAILER, USING THE SAME PROCEDURES SHOWN IN THE LOAD ON PAGE 10. FOR ALTERNATIVE LOADING PROCEDURES SEE PAGES 12 THROUGH 17. SEE GENERAL NOTE "M" ON PAGE 2.
 - (B) SKIDDED UNITS WHICH DO NOT MEET THE REQUIREMENTS IN (A) ABOVE MUST BE LOADED AS SHOWN ON PAGES 12 THROUGH 17.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	197	132
2" X 6"	66	66
NAILS	NO. REQD	POUNDS
10d (3"	80	1-1/4
12d (3-1/4"	168	3
20d (4"	96	3-1/4
STEEL STRAPPING, 1-1/4" X .035"	100' REQD	15 LBS
SEAL FOR 1-1/4" STRAPPING	10 REQD	NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
SKIDDED UNIT	27	19,440 LBS
DUNNAGE		419 LBS
TOTAL WEIGHT		19,859 LBS



SIDE PANELS, SEE GENERAL NOTE "M" ON PAGE 2.

FORWARD BULKHEAD, SEE SPECIAL NOTE 9 ON PAGE 13.

UNIT WIDTH

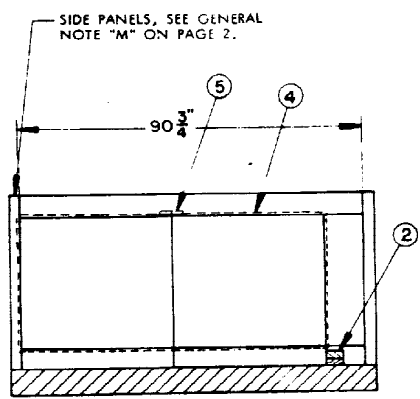
HOLE COVERING PLATES, SEE GENERAL NOTE "M" ON PAGE 2.

KEY NUMBERS

- ① FORWARD BULKHEAD ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 57 AND SPECIAL NOTE 9 ON PAGE 13.
- ② SIDE BLOCKING, 2" X 4" X 36" (DOUBLED) (9 REQD). POSITION THE FIRST PIECE AGAINST THE BASE OF THE UNIT AND NAIL TO THE TRAILER FLOOR W/5-12d NAILS. NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER. SEE SPECIAL NOTES 3 AND 4 ON PAGE 13.
- ③ REAR BLOCKING (1 REQD). SEE THE "RETAINER ASSEMBLY A" DETAIL ON PAGE 57. SEE SPECIAL NOTE 11 ON PAGE 13.
- ④ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 22'-0" LONG STEEL STRAPPING (9 REQD). INSTALL TO ENCIRCLE (2) LATERALLY ADJACENT UNITS AS SHOWN. SEE SPECIAL NOTE 7 ON PAGE 13.
- ⑤ SEAL FOR 1-1/4" STRAPPING (18 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.

ISOMETRIC VIEW

A PALLETIZED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED OR SKIDDED UNITS.

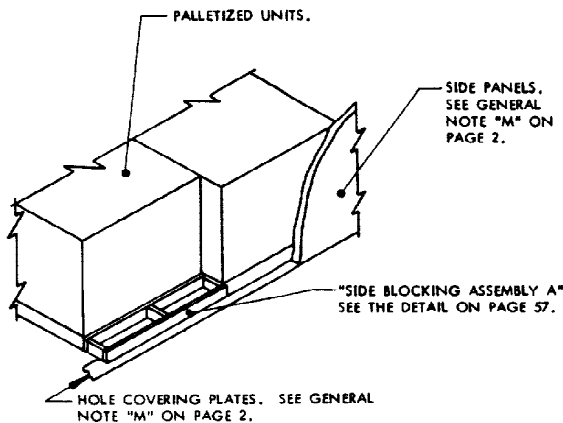


SECTION A-A

SEMITRAILER, 34 TON, MB7Z (TYPICAL)

SPECIAL NOTES:

1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED ON A SEMITRAILER, 34 TON, M872, HAVING OVERALL DIMENSIONS OF 40'-9-1/4" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE GENERAL NOTE "M" ON PAGE 2.
2. THE PALLETIZED UNIT SHOWN IN THE TWO WIDE STAGGERED LOAD ON PAGE 12 HAS OVERALL DIMENSIONS OF 40" LONG BY 48" WIDE BY 42" HIGH AND A WEIGHT OF 2,500 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS AND SKIDDED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. DUE TO THE SIDE HOLE COVERING PLATES WHICH REDUCE THE NAILABLE AREA ACROSS THE M872 TRAILER WIDTH, THE PROCEDURES DEPICTED ON PAGE 12 ARE ONLY APPLICABLE FOR PALLETIZED UNITS HAVING A LENGTH OF 41-1/2" OR LESS. IF THE PALLETIZED UNITS BEING LOADED HAVE A LENGTH GREATER THAN 41-1/2" LOAD AS SHOWN IN THE ISOMETRIC VIEW ON PAGE 12 BUT USE A "SIDE BLOCKING ASSEMBLY A" AS SHOWN IN THE "ALTERNATIVE SIDE BLOCKING" ON THIS PAGE IN LIEU OF EACH PIECE MARKED (2). NOTE: IF DESIRED THE "SIDE BLOCKING ASSEMBLY A" MAY ALSO BE USED IN THE LOAD SHOWN ON PAGE 12 IN LIEU OF PIECES MARKED (2), WHICH ARE NAILED TO THE TRAILER FLOOR IT IS PERMISSIBLE TO POSITION THE PALLETIZED UNITS ON TOP OF THE HOLE COVERING PLATES.
4. IF THE LOAD IS BEING TRANSPORTED ON AN M871 SEMITRAILER, USE A "SIDE BLOCKING ASSEMBLY A" AS SHOWN IN THE "ALTERNATIVE SIDE BLOCKING" ON THIS PAGE, IN LIEU OF EACH PIECE MARKED (2). NOTE: A NON-NAILABLE SIDE BLOCKING IS REQUIRED DUE TO THE FORWARD 10'-0" LENGTH OF THE TRAILER FLOOR BEING ALL STEEL.
5. FOR AN ALTERNATIVE METHOD OF TRANSPORTING AMMUNITION ITEMS WHICH ARE PALLETIZED ON A 40" X 48" PALLET, SEE THE LOAD ON PAGES 14 THROUGH 19. FOR AN ALTERNATIVE METHOD OF TRANSPORTING AMMUNITION ITEMS WHICH ARE PALLETIZED ON A 35" X 45-1/2" PALLET SEE THE LOAD ON PAGES 6 THROUGH 9 AND PAGES 14 THROUGH 19. NOTE: BECAUSE OF THE HOLE COVERING PLATES ON THE SIDES OF THE M871 AND M872 SEMITRAILERS, THE METHODS SHOWN ON PAGES 6 THROUGH 9, DEPICTING NAILED DOWN SIDE BLOCKING, WILL NOT APPLY TO AMMUNITION ITEMS PALLETIZED ON A 40" X 48" PALLET.
6. FOR AN ALTERNATIVE METHOD OF TRANSPORTING SKIDDED UNITS SEE THE LOAD ON PAGES 6 THROUGH 11 AND PAGES 16 THROUGH 19.
7. ALL PALLETIZED UNITS WHICH ARE OVER 30" IN HEIGHT MUST BE UNITIZED WITH ANTI-SWAY STRAPS, SHOWN AS PIECE MARKED (4) ON PAGE 12. PALLETIZED UNITS WHICH ARE LESS THAN 30" IN HEIGHT WILL NOT REQUIRE ANTI-SWAY STRAPS. FOR EXAMPLE SEE THE LOAD ON PAGE 8.
8. ALL SKIDDED UNITS WHICH HAVE A HEIGHT GREATER THAN TWO-THIRDS OF THEIR LENGTH OR WIDTH (WHICHEVER IS SMALLER) MUST BE UNITIZED WITH ANTI-SWAY STRAPS, SHOWN AS PIECE MARKED (4) ON PAGE 12. SKIDDED UNITS THAT HAVE A HEIGHT ONE-THIRD LESS THAN THEIR WIDTH OR LENGTH (WHICHEVER IS SMALLER) WILL NOT REQUIRE ANTI-SWAY STRAPS. FOR EXAMPLE, SEE THE LOAD ON PAGE 8.
9. DUE TO "REINFORCING GUSSETS" LOCATED ON THE FORWARD BULKHEAD OF THE M872 SEMITRAILER A "FORWARD BULKHEAD ASSEMBLY", SHOWN AS PIECE MARKED (1) ON PAGE 12, MUST BE USED. IF THE LOAD IS BEING TRANSPORTED ON AN M871 SEMITRAILER A "FORWARD BULKHEAD ASSEMBLY" MUST BE USED DUE TO THE FOUR (4) EYEBOLTS POSITIONED ON THE FORWARD BULKHEAD.
10. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE REDUCED BY A MULTIPLE OF TWO (2) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 12.
11. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12" USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 12. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 12" USE A "SOLID FILL REAR BLOCKING" AS SHOWN ON PAGE 58.
12. IF HOLE COVERING PLATES ARE NOT PROVIDED WITH THE VEHICLE SEE THE "ALTERNATIVE HOLE COVERING METHODS" ON PAGE 59.

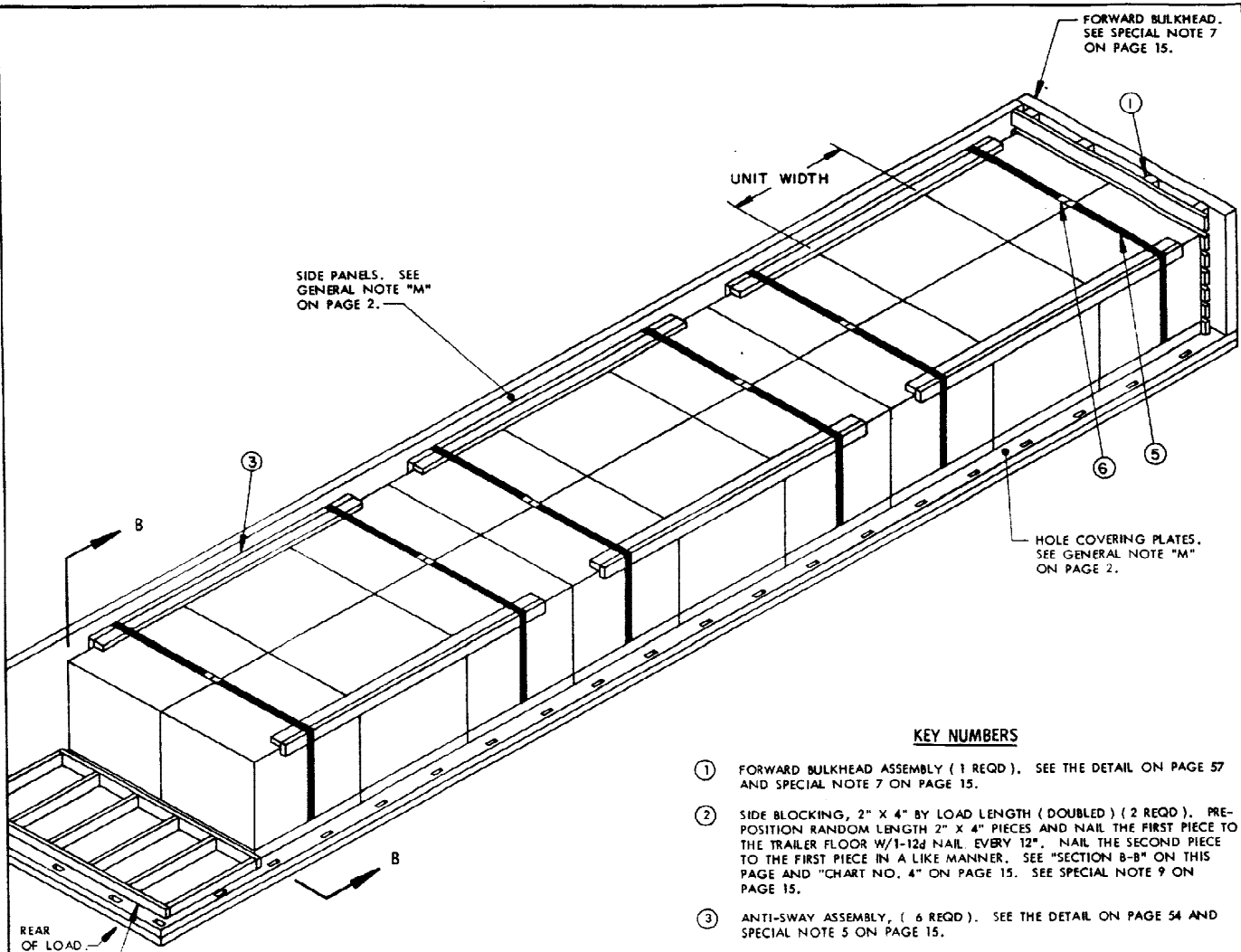


ALTERNATIVE SIDE BLOCKING
SEE SPECIAL NOTE 4 ON THIS PAGE.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	86	58
2" X 6"	53	53
4" X 4"	16	22
NAILS	NO. REQD	POUNDS
10d (3")	198	3-1/4
STEEL STRAPPING, 1-1/4" X .035"	189' REQD	27 LBS
SEAL FOR 1-1/4" STRAPPING	18 REQD	NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNIT	18	45,000 LBS
DUNNAGE		297 LBS
TOTAL WEIGHT		45,297 LBS

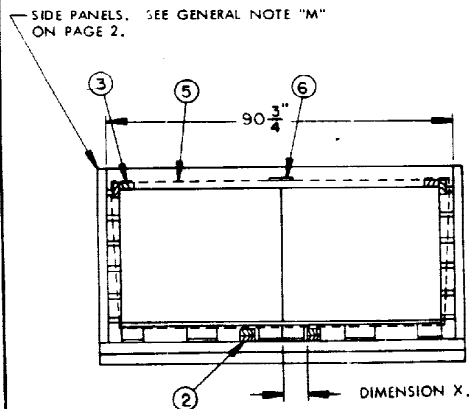


ISOMETRIC VIEW

THE LOAD PROCEDURES DEPICTED ARE APPLICABLE TO PALLETIZED UNITS ONLY. SEE SPECIAL NOTES 6 AND 9 ON PAGE 15.

KEY NUMBERS

- ① FORWARD BULKHEAD ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 57 AND SPECIAL NOTE 7 ON PAGE 15.
- ② SIDE BLOCKING, 2" X 4" BY LOAD LENGTH (DOUBLED) (2 REQD). PRE-POSITION RANDOM LENGTH 2" X 4" PIECES AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/1-12d NAIL EVERY 12". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER. SEE "SECTION B-B" ON THIS PAGE AND "CHART NO. 4" ON PAGE 15. SEE SPECIAL NOTE 9 ON PAGE 15.
- ③ ANTI-SWAY ASSEMBLY, (6 REQD). SEE THE DETAIL ON PAGE 54 AND SPECIAL NOTE 5 ON PAGE 15.
- ④ REAR BLOCKING (1 REQD). SEE THE "RETAINER ASSEMBLY A" DETAIL ON PAGE 57. SEE SPECIAL NOTES 10 AND 11 ON PAGE 15.
- ⑤ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 22'-0" LONG STEEL STRAPPING (6 REQD). INSTALL TO ENCIRCLE TWO (2) Laterally ADJACENT UNITS, AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN, SEE SPECIAL NOTE 5 ON PAGE 15.
- ⑥ SEAL FOR 1-1/4" STRAPPING (12 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



SECTION B-B

CHART NO. 4

GUIDE FOR PRE-POSITIONED DUNNAGE, SHOWN AS PIECES MARKED ②, ON PAGE 14.

IF THE LENGTH OF THE PALLETIZED UNIT IS	DIMENSIONS X WILL BE
35"	4-1/2"
36"	5"
37"	5-1/2"
38"	6"
39"	6-1/2"
40"	6-1/2"
41"	7"
42"	7-1/2"
43"	8"
44"	8-1/2"

SPECIAL NOTES:

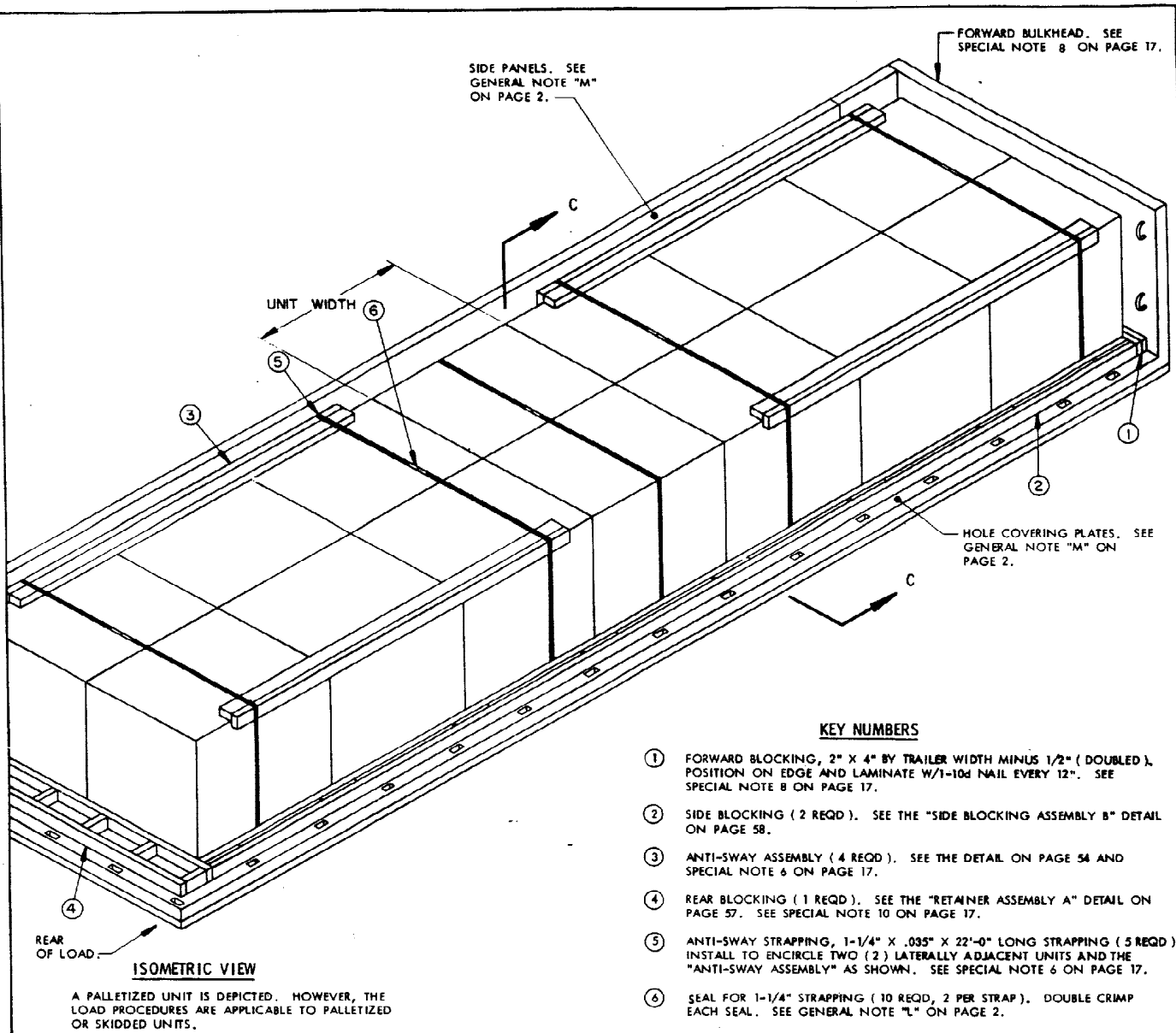
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED ON A SEMITRAILER, 34 TON, M872, HAVING OVERALL DIMENSIONS OF 40'-9-1/4" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE GENERAL NOTE "M" ON PAGE 2.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL 2-WIDE LOAD ON PAGE 14 HAS OVERALL DIMENSIONS OF 40" LONG BY 48" WIDE BY 42" HIGH AND A WEIGHT OF 2,500 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS. REFER TO "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. DUE TO THE SIDE HOLE COVERING PLATES, WHICH REDUCE THE AVAILABLE AREA ACROSS THE M872 TRAILER WIDTH, THE PROCEDURES DEPICTED ON PAGE 14 ARE APPLICABLE FOR PALLETIZED UNITS HAVING A LENGTH OF 44" OR LESS. IT IS PERMISSIBLE TO POSITION THE PALLETIZED UNITS ON TOP OF THE SIDE HOLE COVERING PLATES.
4. FOR AN ALTERNATIVE METHOD OF TRANSPORTING AMMUNITION ITEMS WHICH ARE PALLETIZED ON A 40" X 48" PALLET SEE THE LOAD ON PAGES 12, 13, AND PAGES 16 THROUGH 19. FOR AN ALTERNATIVE METHOD OF TRANSPORTING AMMUNITION ITEMS WHICH ARE PALLETIZED ON A 35" X 45-1/2" PALLET SEE THE LOAD ON PAGES 6 THROUGH 9, PAGES 12, 13, AND PAGES 16 THROUGH 19. NOTE: BECAUSE OF THE HOLE COVERING PLATES ON THE SIDES OF THE M871 AND M872 SEMITRAILERS, THE METHODS SHOWN ON PAGES 6 THROUGH 9, DEPICTING NAILED DOWN SIDE BLOCKING, WILL NOT APPLY TO AMMUNITION ITEMS PALLETIZED ON A 40" X 48" PALLET.
5. ALL PALLETIZED UNITS WHICH ARE OVER 30" IN HEIGHT MUST BE UNITIZED WITH ANTI-SWAY STRAPS, SHOWN AS PIECE MARKED ③ ON PAGE 14 TOGETHER WITH "ANTI-SWAY ASSEMBLIES" SHOWN AS PIECE MARKED ③ ON PAGE 14. PALLETIZED UNITS WHICH ARE LESS THAN 30" IN HEIGHT WILL NOT REQUIRE ANTI-SWAY STRAPS OR ANTI-SWAY ASSEMBLIES. FOR EXAMPLE SEE THE LOAD ON PAGE 8.
6. THE LOAD AS SHOWN ON PAGE 14 IS NOT APPLICABLE FOR SKIDDED UNITS BECAUSE OF THE PRE-POSITIONED SIDE BLOCKING MARKED ②. IF SKIDDED UNITS ARE BEING TRANSPORTED SEE THE LOAD ON PAGES 6 THROUGH 13 AND PAGES 16 THROUGH 19.
7. DUE TO THE "REINFORCING GUSSETS" LOCATED ON THE FORWARD BULKHEAD OF THE M872 SEMITRAILER, A "FORWARD BULKHEAD ASSEMBLY" SHOWN AS PIECE MARKED ① ON PAGE 12, MUST BE USED.
8. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE REDUCED BY A MULTIPLE OF TWO (2) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 14.
9. THE LOAD AS SHOWN ON PAGE 14 IS NOT APPLICABLE FOR THE M871 SEMITRAILER BECAUSE THE FORWARD PORTION OF THE M871 SEMITRAILER FLOOR IS ALL STEEL. HOWEVER, IF DESIRED, THE METHOD SHOWN MAY BE USED ON THE REAR PORTION ONLY, IN WHICH CASE A HEADER AND BACK-UP CLEAT, AS SHOWN IN THE LOAD ON PAGE 6, MUST BE POSITIONED AT THE FORWARD END OF THE LOAD.
10. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12" USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 14. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 12" USE A "SOLID FILL REAR BLOCKING" AS SHOWN ON PAGE 58.
11. IF DESIRED, OR IF REQUIRED TO MAKE LOAD ADJUSTMENTS, A "RETAINER ASSEMBLY A" SHOWN AS PIECE MARKED ④ ON PAGE 14, MAY BE USED AT THE FORWARD END OF THE LOAD IN LIEU OF THE "FORWARD BULKHEAD ASSEMBLY" SHOWN AS PIECE MARKED ① ON PAGE 14. A "RETAINER ASSEMBLY A" MAY ALSO BE USED IN THE CENTER OF THE LOAD FOR A LESS-THAN-FULL LOAD TO HELP DISTRIBUTE THE WEIGHT. SEE THE LOAD ON PAGE 26 FOR EXAMPLE.
12. IF HOLE COVERING PLATES ARE NOT PROVIDED WITH THE VEHICLES, SEE THE "ALTERNATIVE HOLE COVERING METHODS" ON PAGE 59.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	296	198
2" X 6"	53	53
4" X 4"	16	22
NAILS	NO. REQD	POUNDS
10d (3")	204	3-1/4
12d (3-1/4")	148	2-1/2
STEEL STRAPPING, 1-1/4" X .035"	132' REQD	19 LBS
SEAL FOR 1-1/4" STRAPPING	12 REQD	NIL

LOAD AS SHOWN

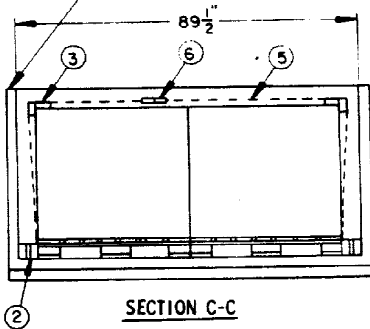
ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNIT	18	45,000 LBS
DUNNAGE		571 LBS
TOTAL WEIGHT		45,571 LBS (APPROX)



KEY NUMBERS

- ① FORWARD BLOCKING, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (DOUBLED), POSITION ON EDGE AND LAMINATE W/1-10d NAIL EVERY 12". SEE SPECIAL NOTE 8 ON PAGE 17.
- ② SIDE BLOCKING (2 REQD). SEE THE "SIDE BLOCKING ASSEMBLY B" DETAIL ON PAGE 58.
- ③ ANTI-SWAY ASSEMBLY (4 REQD). SEE THE DETAIL ON PAGE 54 AND SPECIAL NOTE 6 ON PAGE 17.
- ④ REAR BLOCKING (1 REQD). SEE THE "RETAINER ASSEMBLY A" DETAIL ON PAGE 57. SEE SPECIAL NOTE 10 ON PAGE 17.
- ⑤ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 22'-0" LONG STRAPPING (5 REQD). INSTALL TO ENCIRCLE TWO (2) Laterally ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN. SEE SPECIAL NOTE 6 ON PAGE 17.
- ⑥ SEAL FOR 1-1/4" STRAPPING (10 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.

SIDE PANELS. SEE GENERAL NOTE "M" ON PAGE 2.



SPECIAL NOTES:

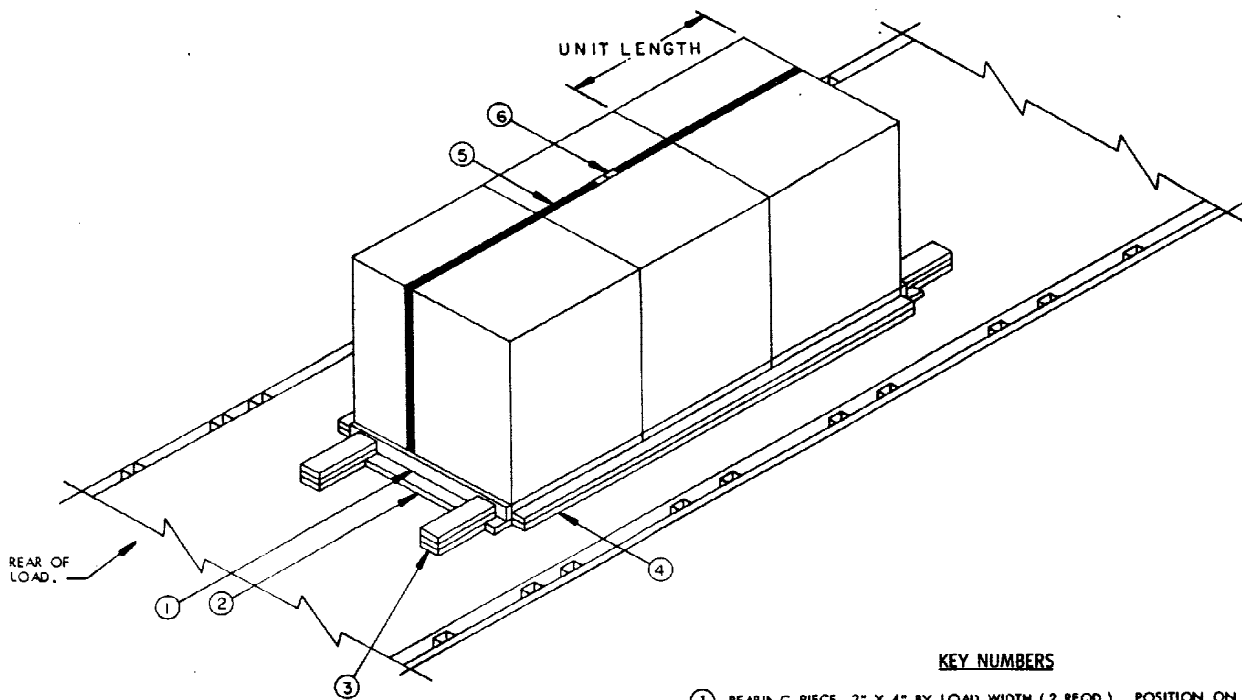
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED ON A SEMITRAILER, 22-1/2 TON, M871, HAVING OVERALL DIMENSIONS OF 29'-10" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE GENERAL NOTE "M" ON PAGE 2.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL 2-WIDE LOAD ON PAGE 16 HAS OVERALL DIMENSIONS OF 40" LONG BY 48" WIDE BY 42" HIGH AND A WEIGHT OF 2,500 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS AND SKIDDED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE PROCEDURES DEPICTED ON PAGE 16 ARE APPLICABLE FOR PALLETIZED UNITS HAVING A LENGTH OF 43-1/4" OR LESS. THE PROCEDURES DEPICTED ARE ALSO APPLICABLE TO SKIDDED UNITS. IT IS PERMISSIBLE TO POSITION THE UNITS ON TOP OF THE SIDE HOLE COVERING PLATES.
4. FOR AN ALTERNATIVE METHOD OF TRANSPORTING AMMUNITION ITEMS WHICH ARE PALLETIZED ON A 40" X 48" PALLET SEE THE LOAD ON PAGES 12 THROUGH 15, 18, AND 19. FOR AN ALTERNATIVE METHOD OF TRANSPORTING AMMUNITION ITEMS WHICH ARE PALLETIZED ON A 35" X 45-1/2" PALLET SEE THE LOAD ON PAGES 6 THROUGH 9, 12 THROUGH 15, 18 AND 19. NOTE: BECAUSE OF THE HOLE COVERING PLATES ON THE SIDES OF THE M871 AND M872 SEMITRAILERS, THE METHODS SHOWN ON PAGES 6 THROUGH 9, DEPICTING NAILED DOWN SIDE BLOCKING, WILL NOT APPLY TO AMMUNITION ITEMS PALLETIZED ON A 40" X 48" PALLET.
5. FOR AN ALTERNATIVE METHOD OF TRANSPORTING SKIDDED UNITS SEE THE LOAD ON PAGES 6 THROUGH 13 AND PAGES 16 THROUGH 19.
6. ALL PALLETIZED UNITS WHICH ARE OVER 30" IN HEIGHT MUST BE UNITIZED WITH ANTI-SWAY STRAPS, SHOWN AS PIECE MARKED ⑤ ON PAGE 16 TOGETHER WITH "ANTI-SWAY ASSEMBLIES" SHOWN AS PIECE MARKED ③ ON PAGE 16. PALLETIZED UNITS WHICH ARE LESS THAN 30" IN HEIGHT WILL NOT REQUIRE ANTI-SWAY STRAPS OR ANTI-SWAY ASSEMBLIES. FOR EXAMPLE SEE THE LOAD ON PAGE 8.
7. ALL SKIDDED UNITS WHICH HAVE A HEIGHT GREATER THAN TWO-THIRDS OF THEIR LENGTH OR WIDTH (WHICHEVER IS SMALLER) MUST BE UNITIZED WITH ANTI-SWAY STRAPS, SHOWN AS PIECE MARKED ⑤ ON PAGE 16 TOGETHER WITH "ANTI-SWAY ASSEMBLIES" SHOWN AS PIECE MARKED ③ ON PAGE 16. SKIDDED UNITS THAT HAVE A HEIGHT ONE-THIRD LESS THAN THEIR WIDTH OR LENGTH (WHICHEVER IS SMALLER) WILL NOT REQUIRE ANTI-SWAY STRAPS OR ANTI-SWAY ASSEMBLIES. FOR EXAMPLE SEE THE LOAD ON PAGE 8.
8. DUE TO THE "FOUR (4) EYEBOLTS" LOCATED ON THE FORWARD BULKHEAD OF THE M871 SEMITRAILER, FORWARD BLOCKING SHOWN AS PIECE MARKED ① ON PAGE 16, MUST BE USED. IF DESIRED A "FORWARD BULKHEAD ASSEMBLY" SHOWN AS PIECE MARKED ① ON PAGE 14 MAY BE USED. IF THE LOAD IS BEING TRANSPORTED ON AN M872 SEMITRAILER A "FORWARD BULKHEAD ASSEMBLY" MUST BE USED DUE TO THE "REINFORCING GUSSETS" POSITIONED ON THE FORWARD BULKHEAD.
9. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNITS BEING LOADED. A LOAD CAN BE REDUCED BY A MULTIPLE OF TWO (2) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 16.
10. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12" USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 16. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 12" USE A "SOLID FILL REAR BLOCKING" AS SHOWN ON PAGE 58.
11. IF DESIRED, OR IF REQUIRED TO MAKE LOAD ADJUSTMENTS, A "RETAINER ASSEMBLY A" SHOWN AS PIECE MARKED ④ ON PAGE 16, MAY BE USED AT THE FORWARD END OF THE LOAD IN LIEU OF THE "FORWARD BLOCKING" SHOWN AS PIECE MARKED ① ON PAGE 16. A "RETAINER ASSEMBLY A" MAY ALSO BE USED IN THE CENTER OF THE LOAD FOR A LESS-THAN-FULL LOAD TO HELP DISTRIBUTE THE WEIGHT. SEE THE LOAD ON PAGE 26 FOR EXAMPLE.
12. IF HOLE COVERING PLATES ARE NOT PROVIDED WITH THE VEHICLE, SEE THE "ALTERNATIVE HOLE COVERING METHODS" ON PAGE 59.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	16'	6
2" X 4"	226'	151
NAILS	NO. REQD	POUNDS
6d	48	1/2
10d (3")	144	2-1/4
STEEL STRAPPING, 1-1/4" X .035" ----- 110' REQD -----		16 LBS
SEAL FOR 1-1/4" STRAPPING ----- 10 REQD -----		NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNIT -----	14 -----	35,000 LBS
DUNNAGE -----		333 LBS
TOTAL WEIGHT -----		35,333 LBS



TYPICAL LTL

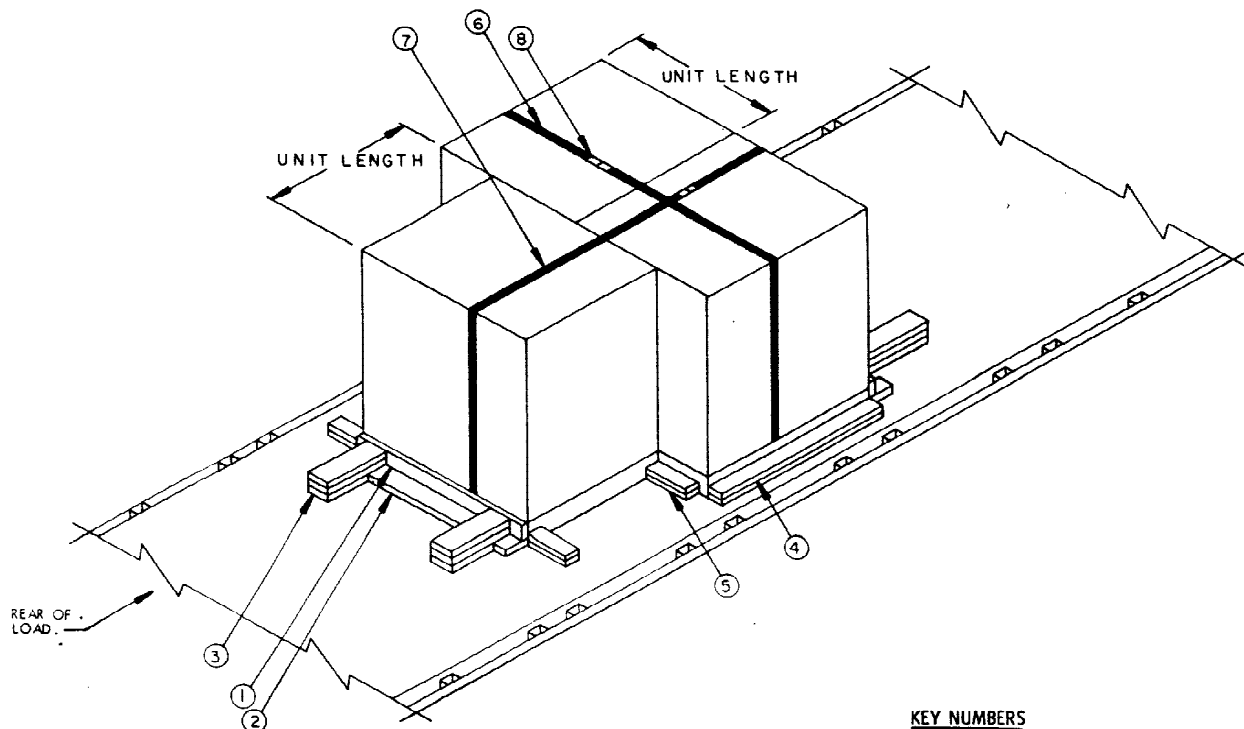
A PALLETIZED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED OR SKIDDED UNITS.

SPECIAL NOTES:

1. A TYPICAL LTL LOAD OF THREE (3) UNITS OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED ON A SEMITRAILER, STAKE, 12 TON, M127, HAVING OVERALL DIMENSIONS OF 28'-8" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE 7 BELOW.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL LTL LOAD ON THIS PAGE HAS OVERALL DIMENSIONS OF 40" LONG BY 48" WIDE BY 50-1/2" HIGH AND A WEIGHT OF 1,764 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS AND SKIDDED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE LENGTH OF THE BACK-UP PIECES, SHOWN AS PIECE MARKED (3) ON THIS PAGE, AND THE NAILS REQUIRED WILL CHANGE PER DIFFERENT LOAD WEIGHTS. LONGER BACK-UP PIECES THAN SHOWN MAY BE USED AND 2" X 4" MATERIAL MAY BE USED IN LIEU OF THE 2" X 6" MATERIAL. SEE "CHART NO. 3" ON PAGE 3 FOR GUIDANCE.
4. ANTI-TIP STRAPPING IS NOT REQUIRED FOR PALLETIZED UNITS WHICH HAVE A HEIGHT LESS THAN 30" OR SKIDDED UNITS WHICH HAVE A HEIGHT ONE-THIRD LESS THAN THEIR WIDTH OR LENGTH (WHICHEVER IS SMALLER).
5. IF THE OVERHANG AT THE END OF THE UNIT IS GREATER THAN 1" USE 2" X 6" MATERIAL IN LIEU OF 2" X 4" MATERIAL FOR THE SIDE BLOCKING, TO PROVIDE MORE NAILING SURFACE.
6. SEE "DETAIL A" ON PAGE 55 FOR POSITIONING OF THE BEARING PIECE, HEADER, AND BACK-UP CLEAT, AGAINST THE PALLET BASE OF SKIDDED BASE.
7. THE METHOD SHOWN ABOVE MAY BE USED ON AN M871 OR M872 SEMITRAILER.

KEY NUMBERS

- (1) BEARING PIECE, 2" X 4" BY LOAD WIDTH (2 REQD.). POSITION ON EDGE, ON TOP OF THE HEADER AND IN ALIGNMENT WITH ONE EDGE OF THE HEADER.
- (2) HEADER, 2" X 6" BY LOAD WIDTH (2 REQD.). NAIL TO THE BEARING PIECE W/1-10d NAIL EVERY 12". POSITION THIS ASSEMBLY AGAINST THE BASE OF THE UNIT AND NAIL THE HEADER TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8".
- (3) BACK-UP CLEAT, 2" X 4" BY LENGTH-TO-SUIT (TRIPLED) (4 REQD.). POSITION THE FIRST PIECE AGAINST THE HEADER AND NAIL TO THE TRAILER FLOOR W/5-12d NAILS. POSITION THE SECOND AND THIRD PIECES AGAINST THE BEARING PIECE AND NAIL TO THE FIRST PIECE W/5-20d NAILS IN EACH PIECE. NOTE: FOR THE LOAD SHOWN ON THIS PAGE THE FIRST PIECE IS 18" LONG AND THE SECOND AND THIRD PIECES ARE 22" LONG. SEE SPECIAL NOTES 3 AND 6 ON THIS PAGE.
- (4) SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (AS REQD.). POSITION THE FIRST PIECE AGAINST THE BASE OF THE UNIT AND NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 12". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER. SEE SPECIAL NOTE 5 ON THIS PAGE.
- (5) ANTI-TIP STRAPPING, 1-1/4" X .035" BY LENGTH-TO-SUIT (AS REQD.). INSTALL TO ENCIRCLE LONGITUDINALLY ADJACENT UNITS AS SHOWN. SEE SPECIAL NOTE 4 ON THIS PAGE.
- (6) SEAL FOR 1-1/4" STRAPPING (2 REQD FOR EACH STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



TYPICAL LTL

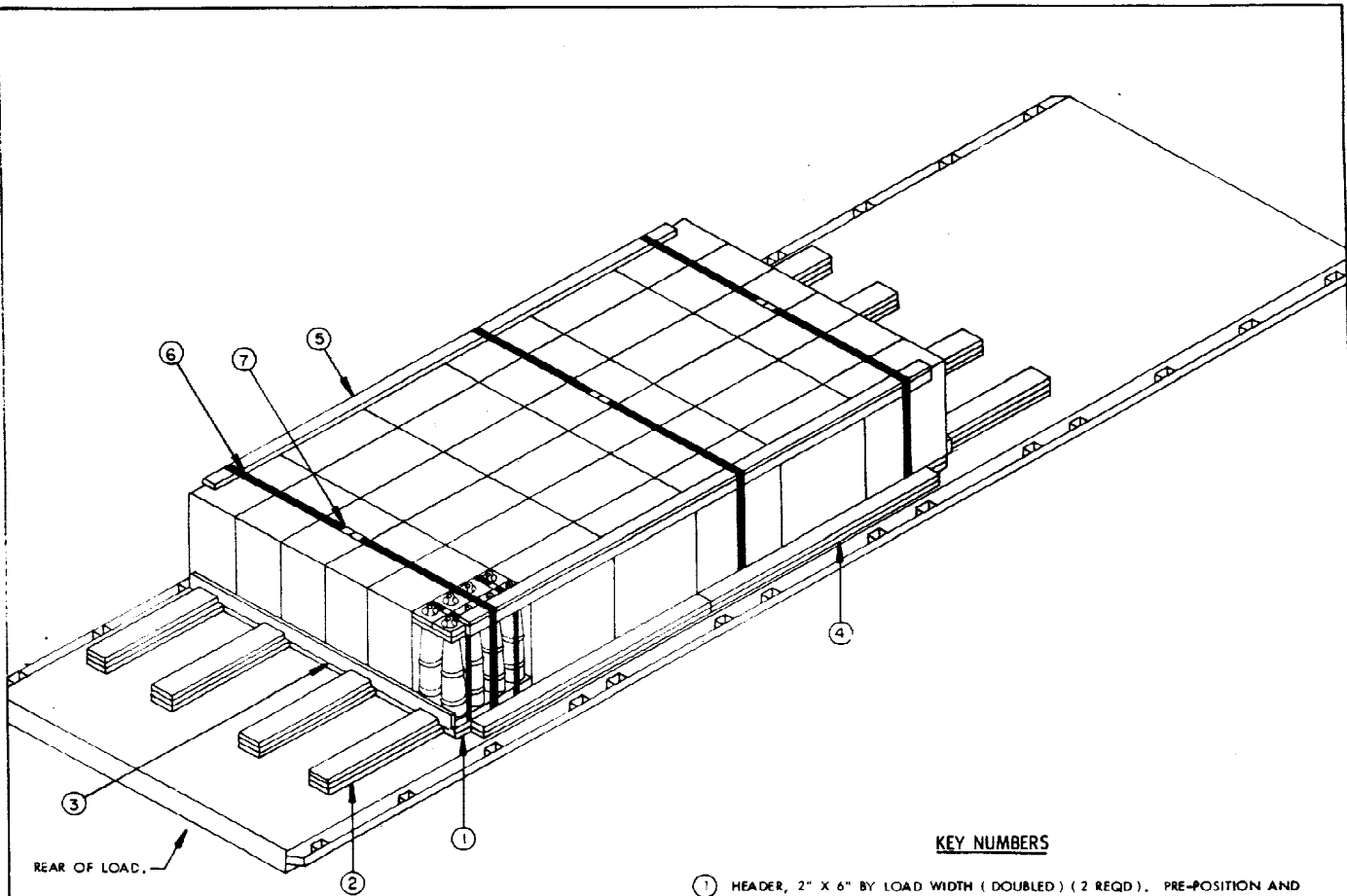
A PALLETIZED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED OR SKIDDED UNITS.

SPECIAL NOTES:

1. A TYPICAL LTL LOAD OF THREE (3) UNITS OF BOXED AMMUNITION ASSEMBLED ON A 48" X 48" PALLET IS SHOWN LOADED ON A SEMITRAILER, STAKE, 12 TON, M127, HAVING OVERALL DIMENSIONS OF 28'-8" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE 6 BELOW.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL LTL LOAD ON THIS PAGE HAS OVERALL DIMENSIONS OF 40-1/2" LONG BY 49-1/4" WIDE BY 55-3/4" HIGH AND A WEIGHT OF 1,913 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS AND SKIDDED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE LENGTH OF THE BACK-UP PIECES, SHOWN AS PIECE MARKED (3) ON THIS PAGE, AND THE NAILS REQUIRED WILL CHANGE PER DIFFERENT LOAD WEIGHTS. LONGER BACK-UP PIECES THAN SHOWN MAY BE USED AND 2" X 4" MATERIAL MAY BE USED IN LIEU OF THE 2" X 6" MATERIAL. SEE "CHART NO. 3" ON PAGE 3 FOR GUIDANCE.
4. ANTI-TIP AND ANTI-SWAY STRAPPING IS NOT REQUIRED FOR PALLETIZED UNITS WHICH HAVE A HEIGHT LESS THAN 30" OR SKIDDED UNITS WHICH HAVE A HEIGHT ONE-THIRD LESS THAN THEIR WIDTH OR LENGTH (WHICHEVER IS SMALLER).
5. SEE "DETAIL A" ON PAGE 55 FOR POSITIONING OF THE BEARING PIECE, HEADER, AND BACK-UP CLEAT, AGAINST THE PALLET BASE OR SKIDDED BASE.
6. PROCEDURES FOR LOADING AN M871 OR M872 SEMITRAILER:
 - (A.) SKIDDED UNITS WHICH WILL HAVE AT LEAST FOUR INCHES OF NAILABLE SPACE REMAINING ON EACH SIDE OF THE LOAD OR AMMUNITION ITEMS WHICH ARE PALLETIZED ON THE 35" X 45-1/2" PALLET AND HAVE A UNIT LENGTH OF 39" OR LESS MAY BE LOADED ON AN M872 SEMITRAILER OR THE REAR PORTION OF A M871 SEMITRAILER, USING THE PROCEDURES SHOWN ON THIS PAGE. FOR ALTERNATIVE LOADING PROCEDURES SEE PAGE 18. SEE GENERAL NOTE "M" ON PAGE 2.
 - (B.) SKIDDED UNITS WHICH DO NOT MEET THE REQUIREMENTS IN (A) ABOVE AND PALLETIZED UNITS HAVING A LENGTH GREATER THAN 39" MUST BE LOADED AS SHOWN ON PAGE 18.

KEY NUMBERS

- (1) BEARING PIECE, 2" X 4" BY LOAD WIDTH (2 REQD). POSITION ON EDGE, ON TOP OF THE HEADER AND IN ALIGNMENT WITH ONE EDGE OF THE HEADER.
- (2) HEADER, 2" X 6" BY LOAD WIDTH (2 REQD). NAIL TO THE BEARING PIECE W/1-10d NAIL EVERY 12". POSITION THIS ASSEMBLY AGAINST THE BASE OF THE UNIT AND NAIL THE HEADER TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8".
- (3) BACK-UP CLEAT, 2" X 6" BY LENGTH-TO-SUIT (TRIPLED) (4 REQD). POSITION THE FIRST PIECE AGAINST THE HEADER AND NAIL TO THE TRAILER FLOOR W/5-12d NAILS. POSITION THE SECOND AND THIRD PIECES AGAINST THE BEARING PIECE AND NAIL TO THE FIRST PIECE W/5-20d NAILS IN EACH PIECE. NOTE: FOR THE LOAD SHOWN ON THIS PAGE THE FIRST PIECE IS 18" LONG AND THE SECOND AND THIRD PIECES ARE 22" LONG. SEE SPECIAL NOTES 3 AND 5 ON THIS PAGE.
- (4) SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (AS REQD). POSITION THE FIRST PIECE AGAINST THE BASE OF THE UNIT AND NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 12". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER.
- (5) SIDE BLOCKING, 2" X 4" X 12" (DOUBLED) (4 REQD). POSITION THE FIRST PIECE AGAINST THE BASE OF THE UNIT AND NAIL TO THE TRAILER FLOOR W/3-12d NAILS. NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER.
- (6) ANTI-SWAY STRAPPING, 1-1/4" X .035" BY LENGTH-TO-SUIT (AS REQD). INSTALL TO ENCIRCLE TWO (2) Laterally adjacent units as shown. SEE SPECIAL NOTE 4 ON THIS PAGE.
- (7) ANTI-TIP STRAPPING, 1-1/4" X .035" BY LENGTH-TO-SUIT (AS REQD). INSTALL TO ENCIRCLE LONGITUDINALLY ADJACENT UNITS AS SHOWN. SEE SPECIAL NOTE 4 ON THIS PAGE.
- (8) SEAL FOR 1-1/4" STRAPPING (2 REQD FOR EACH STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.

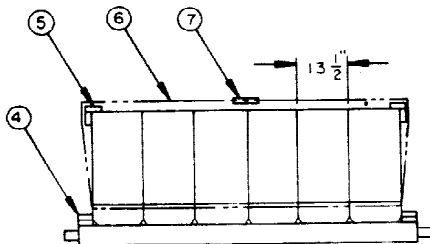


ISOMETRIC VIEW

THE 153MM, 8/PALLET, SLP IS DEPICTED, HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO UNITS OF OTHER DIMENSIONS.

KEY NUMBERS

- ① HEADER, 2" X 6" BY LOAD WIDTH (DOUBLED) (2 REQD). PRE-POSITION AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/1-12 $\frac{1}{2}$ NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST W/1-20 $\frac{1}{2}$ NAIL EVERY 8". POSITION THE HEADER AT THE FORWARD END OF THE LOAD FIRST. SEE SPECIAL NOTE 6 ON PAGE 21.
- ② BACK-UP CLEAT, 2" X 6" BY LENGTH-TO-SUIT (TRIPLED) (8 REQD). POSITION THE FIRST PIECE AGAINST THE HEADER AND NAIL TO THE TRAILER FLOOR W/9-12 $\frac{1}{2}$ NAILS. POSITION THE SECOND PIECE AGAINST THE HEADER AND NAIL TO THE FIRST PIECE W/9-20 $\frac{1}{2}$ NAILS. POSITION THE THIRD PIECE AGAINST THE BEARING PIECE AND NAIL TO THE SECOND PIECE W/9-20 $\frac{1}{2}$ NAILS. TOENAIL THE THIRD PIECE TO THE BEARING PIECE W/2-12 $\frac{1}{2}$ NAILS. NOTE: FOR THE LOAD SHOWN ON THIS PAGE THE FIRST AND SECOND PIECE WILL BE 36" LONG AND THE THIRD PIECE WILL BE CUT-TO-FIT. SEE SPECIAL NOTES 5 AND 7 ON PAGE 21.
- ③ BEARING PIECE, 2" X 4" BY LOAD WIDTH (2 REQD). POSITION AS SHOWN PRIOR TO POSITIONING AND NAILING THE THIRD (TOP) BACK-UP PIECES.
- ④ SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (2 REQD). POSITION THE FIRST PIECE AGAINST THE UNIT SKIDS AND NAIL TO THE TRAILER FLOOR W/1-12 $\frac{1}{2}$ NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER.
- ⑤ ANTI-SWAY ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 52.
- ⑥ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 20'-0" LONG STEEL STRAPPING (3 REQD). INSTALL TO ENCIRCLE SIX (6) LATERALLY ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN.
- ⑦ SEAL FOR 1-1/4" STRAPPING (6 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



REAR VIEW

PIECES MARKED ①, ②, AND ③ HAVE BEEN OMITTED FOR CLARITY.

SEMITRAILER, STAKE, 12 TON, M127 (TYPICAL)

SPECIAL NOTES:

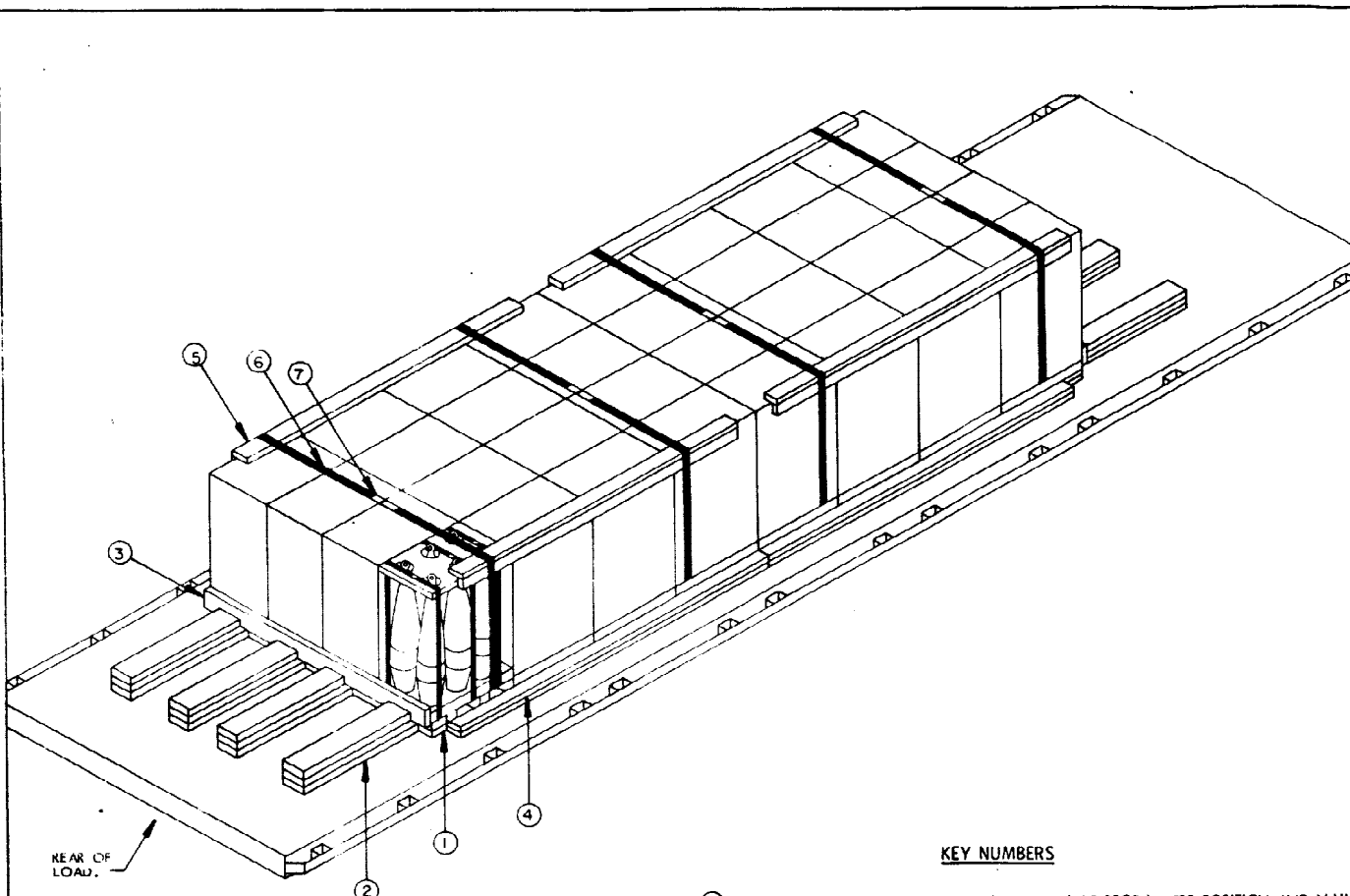
1. A TYPICAL LOAD OF PALLETIZED SEPARATE LOADING PROJECTILES IS SHOWN LOADED ON A SEMITRAILER, STAKE, 12 TON, M127, HAVING OVERALL DIMENSIONS OF 28'-8" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE 10 BELOW.
2. THE 155MM, 8/PALLET, SEPARATE LOADING PROJECTILE SHOWN IN THE LOAD ON PAGE 20 HAS OVERALL DIMENSIONS OF 13-1/2" LONG BY 27" WIDE BY 31-1/2" HIGH AND A WEIGHT OF 800 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS. IF SHIPPING THE 8", 6/PALLET SEE THE LOAD ON PAGE 24 AND IF SHIPPING THE 175MM, 6/PALLET SEE THE LOAD ON PAGE 22. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF SIX (6) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 20, A LOAD CAN BE REDUCED BY ONE (1) UNIT BY USING THE PROCEDURES SHOWN ON PAGES 24 AND 29.
4. FOR SHIPMENT OF A PARTIAL LOAD SEE PAGES 28 AND 29.
5. THE LENGTH OF THE BACK-UP PIECES, SHOWN AS PIECE MARKED (2) ON PAGE 20, AND THE NAILS REQUIRED WILL CHANGE PER DIFFERENT LOAD WEIGHTS. LONGER BACK-UP PIECES THAN SHOWN MAY BE USED AND 2" X 4" MATERIAL MAY BE USED IN LIEU OF THE 2" X 6" MATERIAL. SEE "CHART NO. 3" ON PAGE 3 FOR GUIDANCE. NOTE: THE BEARING PIECE, SHOWN AS KEY NUMBER (3) ON PAGE 20, MUST BE POSITIONED ON EDGE AND TIGHT AGAINST THE PALLET BASE PRIOR TO POSITIONING AND NAILING THE TOP BACK-UP CLEAT.
6. IF DESIRED, AND TO MAKE LOADING EASIER, THE HEADERS SHOWN AS KEY NUMBER (1) MAY BE WIDER THAN 2" X 6" MATERIAL, PROVIDED THERE IS AT LEAST 3" OF AVAILABLE SURFACE EXTENDING BEYOND THE PALLET OVERHANG. THIS WILL ELIMINATE THE NECESSITY OF PRE-POSITIONING THE HEADERS.
7. SEE "DETAIL B" ON PAGE 55 FOR POSITIONING OF THE BEARING PIECE, HEADER, AND BACK-UP CLEAT, AGAINST THE PALLET BASE.
8. IF DESIRED, A "FILLER ASSEMBLY", SHOWN AS PIECE MARKED (3) IN THE LOAD ON PAGE 26, MAY BE USED IN LIEU OF A SEPARATE LOADING PROJECTILE PALLET TO MAINTAIN AN EVEN LOAD PATTERN. MORE THAN ONE "FILLER ASSEMBLY" MAY BE USED WITHIN A LOAD.
9. THE LOAD MUST BE POSITIONED OVER THE STRONG POINTS OF THE SEMITRAILER, SUCH AS THE REAR AXLES AND/OR THE FIFTH WHEEL OF THE TOWING VEHICLE. IF DESIRED THE LOAD MAY BE "SPLIT" AS SHOWN ON PAGE 26.
10. PROCEDURES FOR LOADING AN M871 OR M872 SEMITRAILER:
 - (A) WHEN USING THE LOADING METHOD SHOWN ON PAGE 20 FOR AN M871 OR M872 SEMITRAILER, THERE MUST BE AT LEAST FOUR INCHES OF AVAILABLE SPACE REMAINING ON EACH SIDE OF THE LOAD TO ALLOW FOR THE NAILED DOWN SIDE BLOCKING PIECES MARKED (4). IF DESIRED, A "FLOATING" TYPE OF SIDE BLOCKING, SHOWN AS PIECES MARKED (5) IN THE LOAD ON PAGE 26, MAY BE USED IN LIEU OF THE NAILED DOWN SIDE BLOCKING PIECES MARKED (4), ON PAGE 20.
 - (B) NOTE THAT ON AN M871 SEMITRAILER THE FORWARD 10'-0" LENGTH OF THE TRAILER FLOOR IS ALL STEEL. A MAXIMUM LOAD CAPACITY MAY BE ACHIEVED BY USING ALL "FLOATING" TYPE OF FLOOR BLOCKING, SHOWN AS PIECES MARKED (1), (2), (4), AND (5) IN THE LOAD ON PAGE 26 IN LIEU OF THE NAILED DOWN BLOCKING SHOWN AS PIECES MARKED (1), (2), (3), AND (4) IN THE LOAD ON PAGE 20.
 - (C) WHEN TRANSPORTING A LARGE QUANTITY OF SEPARATE LOADING PROJECTILES ON THE M871 OR M872 SEMITRAILER USE THE PROCEDURES SHOWN ON PAGES 26 AND 27.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	110	74
2" X 6"	98	98
NAILS	NO. REQD	POUNDS
10d (3")	38	3/4
12d (3-1/4")	186	3-1/4
20d (4")	166	6
STEEL STRAPPING, 1-1/4" X .035" ----- 60' REQD ----- 9 LBS		
SEAL FOR 1-1/4" STRAPPING ----- 6 REQD ----- NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
155MM, SLP	36	28,800 LBS
DUNNAGE		363 LBS
TOTAL WEIGHT		29,163 LBS

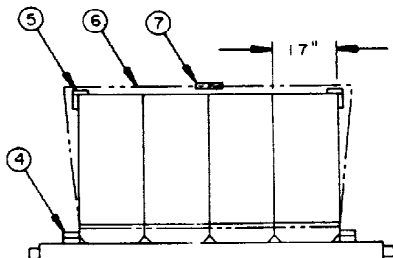


ISOMETRIC VIEW

THE 175MM, 6/PALLET, SLP IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO UNITS OF OTHER DIMENSIONS.

KEY NUMBERS

- ① HEADER, 2" X 6" BY LOAD WIDTH (DOUBLED) (2 REQD). PRE-POSITION AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST W/1-20d NAIL EVERY 8". POSITION THE HEADER AT THE FORWARD END OF THE LOAD FIRST. SEE SPECIAL NOTE 6 ON PAGE 23.
- ② BACK-UP CLEAT, 2" X 6" BY LENGTH-TO-SUIT (TRIPLED) (8 REQD). POSITION THE FIRST PIECE AGAINST THE HEADER AND NAIL TO THE TRAILER FLOOR W/9-12d NAILS. POSITION THE SECOND PIECE AGAINST THE HEADER AND NAIL TO THE FIRST PIECE W/9-20d NAILS. POSITION THE THIRD PIECE AGAINST THE BEARING PIECE AND NAIL TO THE SECOND PIECE W/9-20d NAILS. TOENAIL THE THIRD PIECE TO THE BEARING PIECE W/2-12d NAILS. NOTE: FOR THE LOAD SHOWN ON THIS PAGE THE BEARING AND SECOND PIECE WILL BE 36" LONG AND THE THIRD PIECE WILL BE CUT-TO-FIT. SEE SPECIAL NOTES 5 AND 7 ON PAGE 23.
- ③ BEARING PIECE, 2" X 4" BY LOAD WIDTH (2 REQD). POSITION AS SHOWN PRIOR TO POSITIONING AND NAILING THE THIRD (TOP) BACK-UP PIECES.
- ④ SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (2 REQD). POSITION THE FIRST PIECE AGAINST THE UNIT SKIDS AND NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER.
- ⑤ ANTI-SWAY ASSEMBLY (4 REQD). SEE THE DETAIL ON PAGE 54.
- ⑥ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 20'-0" LONG STEEL STRAPPING (4 REQD). INSTALL TO EN-CIRCLE FOUR (4) LATERALLY ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN.
- ⑦ SEAL FOR 1-1/4" STRAPPING (8 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



REAR VIEW

PIECES MARKED ①, ②, AND ③ HAVE BEEN OMITTED FOR CLARITY.

SPECIAL NOTES:

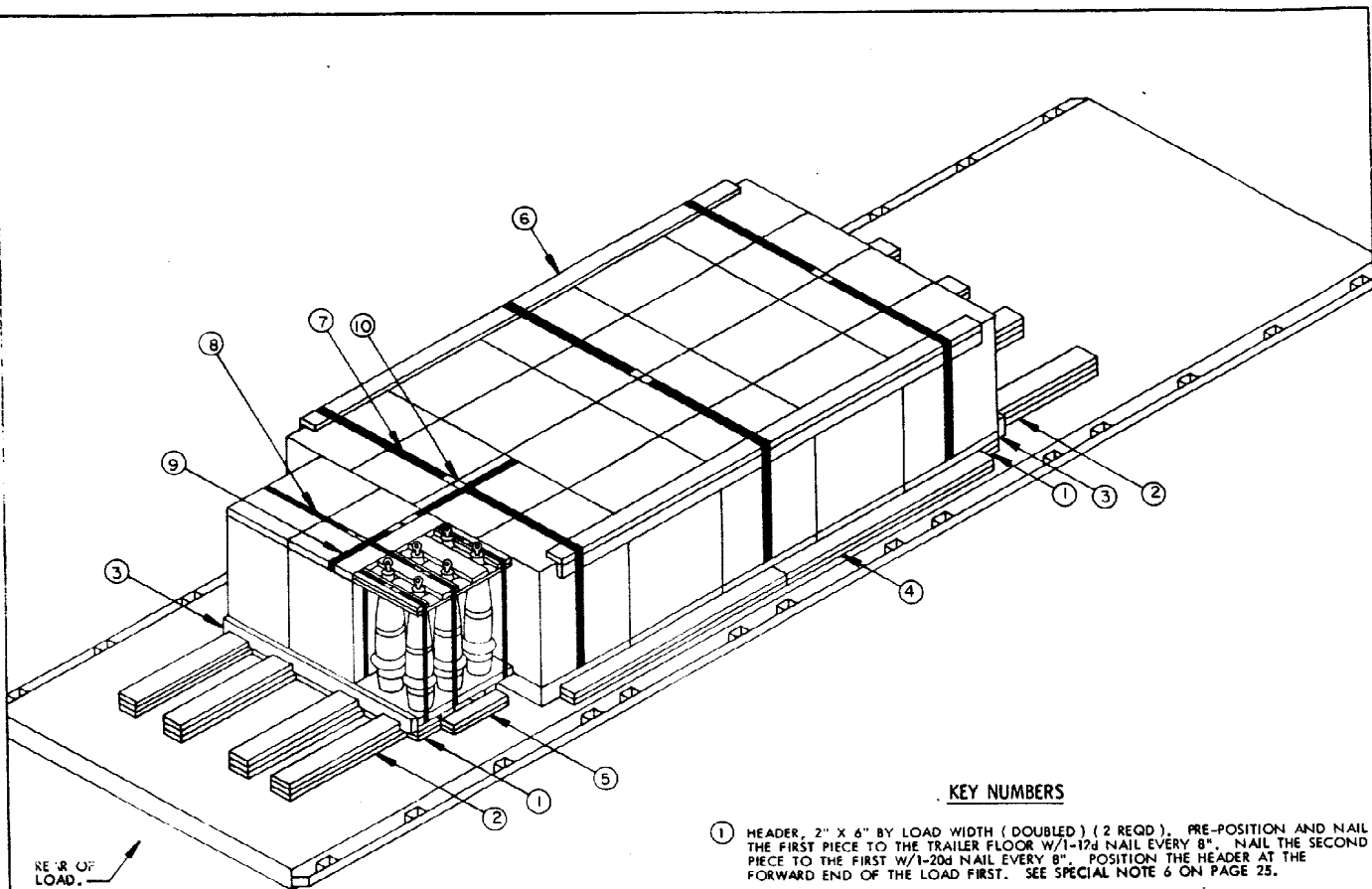
1. A TYPICAL LOAD OF PALLETIZED SEPARATE LOADING PROJECTILES IS SHOWN LOADED ON A SEMITRAILER, STAKE, 12 TON, M127, HAVING OVERALL DIMENSIONS OF 28'-8" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE 11 BELOW.
2. THE 175MM, 6/PALLET SEPARATE LOADING PROJECTILE SHOWN IN THE LOAD ON PAGE 16 HAS OVERALL DIMENSIONS OF 17" LONG BY 25-1/2" WIDE BY 41" HIGH AND A WEIGHT OF 934 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS. IF SHIPPING THE 8", 6/PALLET SEE THE LOAD ON PAGE 24 AND IF SHIPPING THE 155MM, 8/PALLET SEE THE LOAD ON PAGE 20. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF FOUR (4) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 22. A LOAD CAN BE REDUCED BY ONE (1) UNIT BY USING THE PROCEDURES SHOWN ON PAGES 24 AND 29.
4. FOR SHIPMENT OF A PARTIAL LOAD SEE PAGES 28 AND 29.
5. THE LENGTH OF THE BACK-UP PIECES, SHOWN AS PIECE MARKED ② ON PAGE 22 AND THE NAILS REQUIRED WILL CHANGE PER DIFFERENT LOAD WEIGHTS. LONGER BACK-UP PIECES THAN SHOWN MAY BE USED AND 2" X 4" MATERIAL MAY BE USED IN LIEU OF THE 2" X 6" MATERIAL. SEE "CHART NO. 3" ON PAGE 3 FOR GUIDANCE. NOTE: THE BEARING PIECE, SHOWN AS KEY NUMBER ③ ON PAGE 22 MUST BE POSITIONED ON EDGE AND TIGHT AGAINST THE PALLET BASE PRIOR TO POSITIONING AND NAILING THE TOP BACK-UP CLEAT.
6. IF DESIRED, AND TO MAKE LOADING EASIER, THE HEADERS SHOWN AS KEY NUMBER ① MAY BE WIDER THAN 2" X 6" MATERIAL, PROVIDED THERE IS AT LEAST 3" OF NAILABLE SURFACE EXTENDING BEYOND THE PALLET OVERHANG. THIS WILL ELIMINATE THE NECESSITY OF PRE-POSITIONING THE HEADERS.
7. SEE "DETAIL B" ON PAGE 55 FOR POSITIONING OF THE BEARING PIECE, HEADER, AND BACK-UP CLEAT, AGAINST THE PALLET BASE.
8. SEE THE "TYPICAL LADING ITEMS" ON PAGE 5 FOR A DETAIL VIEW OF THE 175MM, 6/PALLET, SLP, SHOWN IN THE LOAD ON PAGE 22.
9. IF DESIRED, A "FILLER ASSEMBLY", SHOWN AS PIECE MARKED ③ IN THE LOAD ON PAGE 26, MAY BE USED IN LIEU OF A SEPARATE LOADING PROJECTILE PALLET TO MAINTAIN AN EVEN LOAD PATTERN. MORE THAN ONE "FILLER ASSEMBLY" MAY BE USED WITHIN A LOAD.
10. THE LOAD MUST BE POSITIONED OVER THE STRONG POINTS OF THE SEMITRAILER, SUCH AS THE REAR AXLES AND/OR THE FIFTH WHEEL OF THE TOWING VEHICLE. IF DESIRED THE LOAD MAY BE "SPLIT" AS SHOWN ON PAGE 26.
11. PROCEDURES FOR LOADING AN M871 OR M872 SEMITRAILER:
 - (A) WHEN USING THE LOADING METHOD SHOWN ON PAGE 22 FOR AN M871 OR M872 SEMITRAILER, THERE MUST BE AT LEAST FOUR INCHES OF NAILABLE SPACE REMAINING ON EACH SIDE OF THE LOAD TO ALLOW FOR THE NAILED DOWN SIDE BLOCKING PIECES MARKED ④. IF DESIRED, A "FLOATING" TYPE OF SIDE BLOCKING, SHOWN AS PIECES MARKED ⑥ IN THE LOAD ON PAGE 26, MAY BE USED IN LIEU OF THE NAILED DOWN SIDE BLOCKING PIECES MARKED ④, ON PAGE 22.
 - (B) NOTE THAT ON AN M871 SEMITRAILER THE FORWARD 10'-0" LENGTH OF THE TRAILER FLOOR IS ALL STEEL. A MAXIMUM LOAD CAPACITY MAY BE ACHIEVED BY USING ALL "FLOATING" TYPE OF FLOOR BLOCKING, SHOWN AS PIECES MARKED ①, ②, ④, AND ⑥ IN THE LOAD ON PAGE 26 IN LIEU OF THE NAILED DOWN BLOCKING SHOWN AS PIECES MARKED ①, ②, ③, AND ④ IN THE LOAD ON PAGE 22.
 - (C) WHEN TRANSPORTING A LARGE QUANTITY OF SEPARATE LOADING PROJECTILES ON THE M871 OR M872 SEMITRAILER, USE THE PROCEDURES SHOWN ON PAGES 26 AND 27.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	140	94
2" X 6"	94	94
NAILS	NO. REQD	POUNDS
10d (3")	52	1
12d (3-1/4")	206	3-1/2
20d (4")	162	5-3/4
STEEL STRAPPING, 1-1/4" X .035" ----- 80' REQD -----		12 LBS
SEAL FOR 1-1/4" STRAPPING ----- 8 REQD -----		NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
175MM, SLP -----	32 -----	29,888 LBS
DUNNAGE -----		398 LBS
TOTAL WEIGHT -----		30,286 LBS

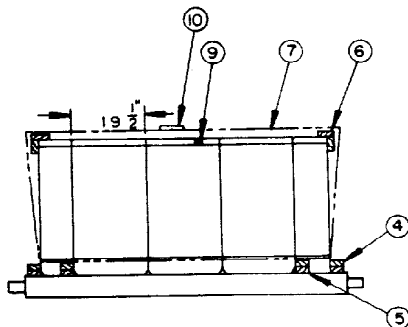


ISOMETRIC VIEW

THE 8" x 6" PALLET, SLP IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO UNITS OF OTHER DIMENSIONS.

KEY NUMBERS

- ① HEADER, 2" X 6" BY LOAD WIDTH (DOUBLED) (2 REQD). PRE-POSITION AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST W/1-20d NAIL EVERY 8". POSITION THE HEADER AT THE FORWARD END OF THE LOAD FIRST. SEE SPECIAL NOTE 6 ON PAGE 25.
- ② BACK-UP CLEAT, 2" X 6" BY LENGTH-TO-SUIT (TRIPLED) (8 REQD). POSITION THE FIRST PIECE AGAINST THE HEADER AND NAIL TO THE TRAILER FLOOR W/9-12d NAILS. POSITION THE SECOND PIECE AGAINST THE HEADER AND NAIL TO THE FIRST PIECE W/9-20d NAILS. POSITION THE THIRD PIECE AGAINST THE BEARING PIECE AND NAIL TO THE SECOND PIECE W/9-20d NAILS. TOENAIL THE THIRD PIECE TO THE BEARING PIECE W/2-12d NAILS. NOTE: FOR THE LOAD SHOWN ON THIS PAGE THE FIRST AND SECOND PIECE WILL BE 36" LONG AND THE THIRD PIECE WILL BE CUT-TO-FIT. SEE SPECIAL NOTES 5 AND 7 ON PAGE 25.
- ③ BEARING PIECE, 2" X 4" BY LOAD WIDTH (2 REQD). POSITION AS SHOWN PRIOR TO POSITIONING AND NAILING THE THIRD (TOP) BACK-UP PIECES.
- ④ SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (4 REQD). POSITION THE FIRST PIECE AGAINST THE UNIT SKIDS AND NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER.
- ⑤ SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (2 REQD). POSITION THE FIRST PIECE AGAINST THE UNIT SKIDS AND NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER.
- ⑥ ANTI-SWAY ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 54.
- ⑦ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 22'-0" LONG STEEL STRAPPING (3 REQD). INSTALL TO ENCIRCLE FOUR (4) LATERALLY ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN.
- ⑧ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 18'-0" LONG STEEL STRAPPING (1 REQD). INSTALL TO ENCIRCLE THREE (3) LATERALLY ADJACENT UNITS AS SHOWN.
- ⑨ ANTI-TIP STRAPPING, 1-1/4" X .035" X 10'-0" LONG STEEL STRAPPING (1 REQD). INSTALL AROUND TOP DECK OF TWO LONGITUDINALLY ADJACENT UNITS AS SHOWN.
- ⑩ SEAL FOR 1-1/4" STRAPPING (10 REQD, 2 PER STRAP). DOUBLED CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



REAR VIEW

PIECES MARKED ①, ②, AND ③ HAVE BEEN OMITTED FOR CLARITY.

SEMITRAILER, STAKE, 12 TON, M127 (TYPICAL)

SPECIAL NOTES:

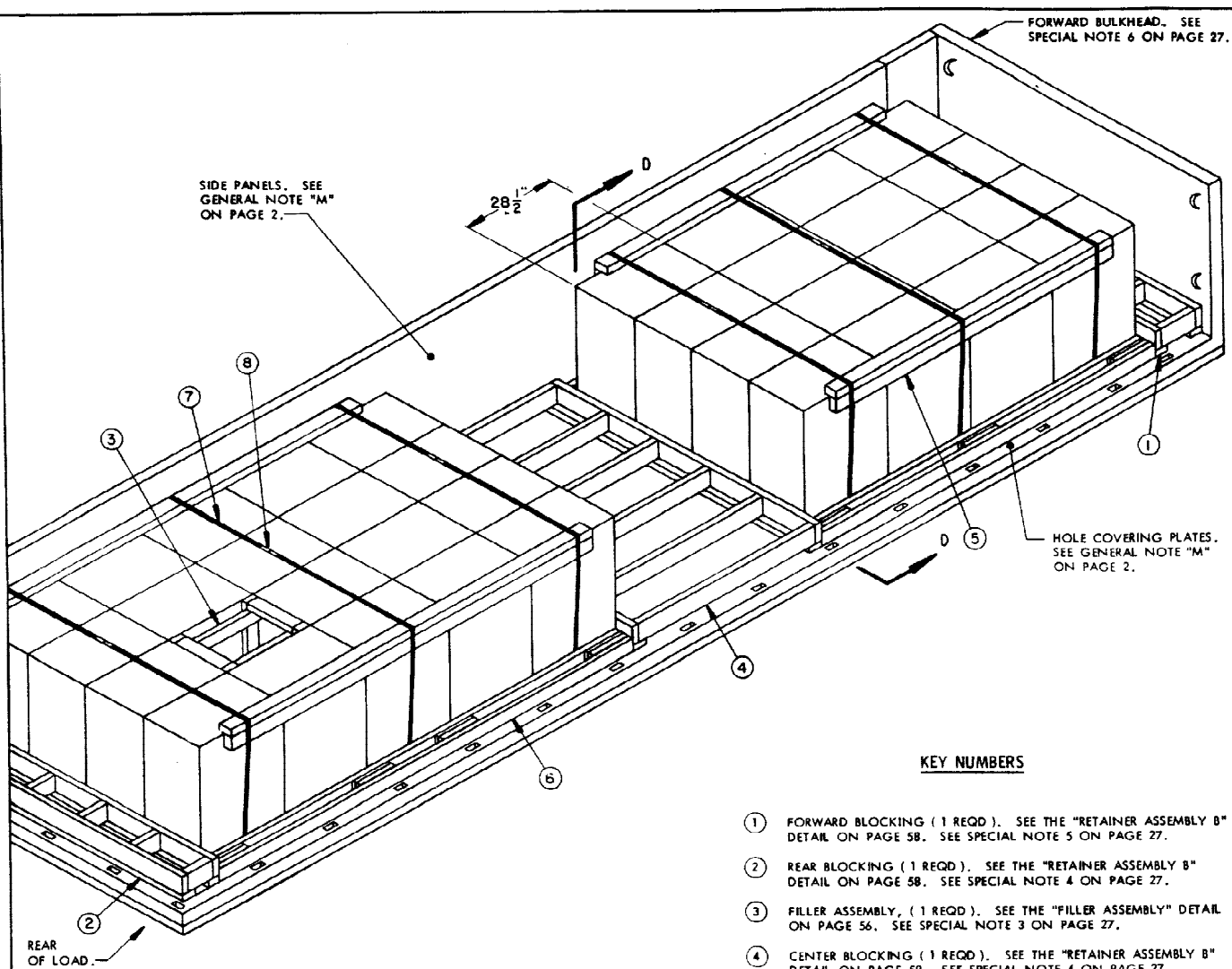
1. A TYPICAL LOAD OF PALLETIZED SEPARATE LOADING PROJECTILES IS SHOWN LOADED ON A SEMITRAILER, STAKE, 12 TON, M127, HAVING OVERALL DIMENSIONS OF 28'-8" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE 1) BELOW.
2. THE 8", 6/PALLET, SEPARATE LOADING PROJECTILE SHOWN IN THE LOAD ON PAGE 18 HAS OVERALL DIMENSIONS OF 19-1/2" LONG BY 28-1/2" WIDE BY 38-1/2" HIGH AND A WEIGHT OF 1,256 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS. IF SHIPPING THE 155MM, 8/PALLET, SEE THE LOAD ON PAGE 24 AND IF SHIPPING THE 175MM, 6/PALLET, SEE THE LOAD ON PAGE 20. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF FOUR (4) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 24. A LOAD CAN BE REDUCED BY ONE (1) UNIT BY USING THE PROCEDURES SHOWN ON PAGES 24 AND 29.
4. FOR SHIPMENT OF A PARTIAL LOAD, SEE PAGES 28 AND 29.
5. THE LENGTH OF THE BACK-UP PIECES, SHOWN AS PIECE MARKED ② ON PAGE 24, AND THE NAILS REQUIRED WILL CHANGE PER DIFFERENT LOAD WEIGHTS. LONGER BACK-UP PIECES THAN SHOWN MAY BE USED AND 2" X 4" MATERIAL MAY BE USED IN LIEU OF THE 2" X 6" MATERIAL. SEE "CHART NO. 3" ON PAGE 3 FOR GUIDANCE. NOTE: THE BEARING PIECE, SHOWN AS KEY NUMBER ③ ON PAGE 24, MUST BE POSITIONED ON EDGE AND TIGHT AGAINST THE PALLET BASE PRIOR TO POSITIONING AND NAILING THE TOP BACK-UP CLEAT.
6. IF DESIRED, AND TO MAKE LOADING EASIER, THE HEADERS SHOWN AS KEY NUMBER ① MAY BE WIDER THAN 2" X 6" MATERIAL, PROVIDED THERE IS AT LEAST 3" OF AVAILABLE SURFACE EXTENDING BEYOND THE PALLET OVERHANG. THIS WILL ELIMINATE THE NECESSITY OF PRE-POSITIONING THE HEADERS.
7. SEE "DETAIL B" ON PAGE 35 FOR POSITIONING OF THE BEARING PIECE, HEADER, AND BACK-UP CLEAT, AGAINST THE PALLET BASE.
8. SEE THE "TYPICAL LADING ITEMS" ON PAGE 5 FOR A DETAIL VIEW OF THE 8", 6/PALLET, SLP, SHOWN IN THE LOAD ON PAGE 24.
9. IF DESIRED, A "FILLER ASSEMBLY", SHOWN AS PIECE MARKED ③ IN THE LOAD ON PAGE 24, MAY BE USED IN LIEU OF A SEPARATE LOADING PROJECTILE PALLET TO MAINTAIN AN EVEN LOAD PATTERN, MORE THAN ONE "FILLER ASSEMBLY" MAY BE USED WITHIN A LOAD.
10. THE LOAD MUST BE POSITIONED OVER THE STRONG POINTS OF THE SEMITRAILER, SUCH AS THE REAR AXLES AND/OR THE FIFTH WHEEL OF THE TOWING VEHICLE. IF DESIRED, THE LOAD MAY BE "SPLIT" AS SHOWN ON PAGE 26.
11. PROCEDURES FOR LOADING AN M871 OR M872 SEMITRAILER:
 - (A) WHEN USING THE LOADING METHOD SHOWN ON PAGE 24 FOR AN M871 OR M872 SEMITRAILER, THERE MUST BE AT LEAST FOUR INCHES OF AVAILABLE SPACE REMAINING ON EACH SIDE OF THE LOAD TO ALLOW FOR THE NAILED DOWN SIDE BLOCKING PIECES MARKED ④. IF DESIRED, A "FLOATING" TYPE OF SIDE BLOCKING, SHOWN AS PIECES MARKED ⑥ IN THE LOAD ON PAGE 26, MAY BE USED IN LIEU OF THE NAILED DOWN SIDE BLOCKING PIECES MARKED ④.
 - (B) NOTE THAT ON AN M871 SEMITRAILER THE FORWARD 10'-0" LENGTH OF THE TRAILER FLOOR IS ALL STEEL. A MAXIMUM LOAD CAPACITY MAY BE ACHIEVED BY USING ALL "FLOATING" TYPE OF FLOOR BLOCKING, SHOWN AS PIECES MARKED ①, ②, ④, AND ⑥ IN THE LOAD ON PAGE 26 IN LIEU OF THE NAILED DOWN BLOCKING SHOWN AS PIECES MARKED ①, ②, ③, AND ④ IN THE LOAD ON PAGE 24.
 - (C) WHEN TRANSPORTING A LARGE QUANTITY OF SEPARATE LOADING PROJECTILES ON THE M871 OR M872 SEMITRAILER USE THE PROCEDURES SHOWN ON PAGES 26 AND 27.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	124	83
2" X 6"	98	98
NAILS	NO. REQD	POUNDS
10d (3")	38	3/4
12d (3-1/4")	210	3-1/2
20d (4")	162	5-3/4
STEEL STRAPPING, 1-1/4" X .035" -----	94' REQD -----	14 LBS
SEAL FOR 1-1/4" STRAPPING -----	10 REQD -----	NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
8", SLP -----	23 -----	28,888 LBS
DUNNAGE -----	-----	386 LBS
TOTAL WEIGHT -----	-----	29,274 LBS



SIDE PANELS. SEE
GENERAL NOTE "M"
ON PAGE 2.

FORWARD BULKHEAD. SEE
SPECIAL NOTE 6 ON PAGE 27.

HOLE COVERING PLATES.
SEE GENERAL NOTE "M"
ON PAGE 2.

REAR
OF LOAD.

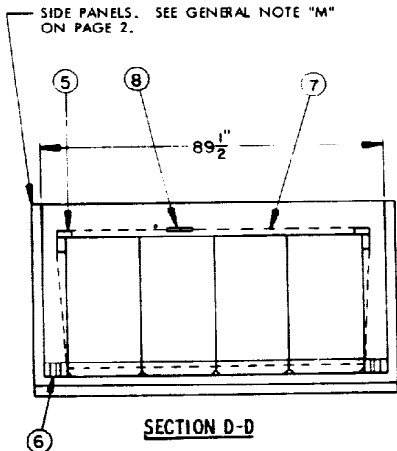
ISOMETRIC VIEW

THE 8' x 4' PALLET, SLP IS DEPICTED. HOWEVER, THE LOAD
PROCEDURES ARE APPLICABLE TO UNITS OF OTHER DIMENSIONS.

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "RETAINER ASSEMBLY B" DETAIL ON PAGE 58. SEE SPECIAL NOTE 5 ON PAGE 27.
- ② REAR BLOCKING (1 REQD). SEE THE "RETAINER ASSEMBLY B" DETAIL ON PAGE 58. SEE SPECIAL NOTE 4 ON PAGE 27.
- ③ FILLER ASSEMBLY, (1 REQD). SEE THE "FILLER ASSEMBLY" DETAIL ON PAGE 56. SEE SPECIAL NOTE 3 ON PAGE 27.
- ④ CENTER BLOCKING (1 REQD). SEE THE "RETAINER ASSEMBLY B" DETAIL ON PAGE 58. SEE SPECIAL NOTE 4 ON PAGE 27.
- ⑤ ANTI-SWAY ASSEMBLY (4 REQD). SEE THE DETAIL ON PAGE 54.
- ⑥ SIDE BLOCKING (4 REQD). SEE THE "SIDE BLOCKING ASSEMBLY B" DETAIL ON PAGE 58.
- ⑦ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 22'-0" LONG STEEL STRAPPING (6 REQD). INSTALL TO ENCIRCLE TWO (2) Laterally ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN.
- ⑧ SEAL FOR 1-1/4" STRAPPING (12 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.

SIDE PANELS. SEE GENERAL NOTE "M"
ON PAGE 2.



SECTION D-D

SPECIAL NOTES:

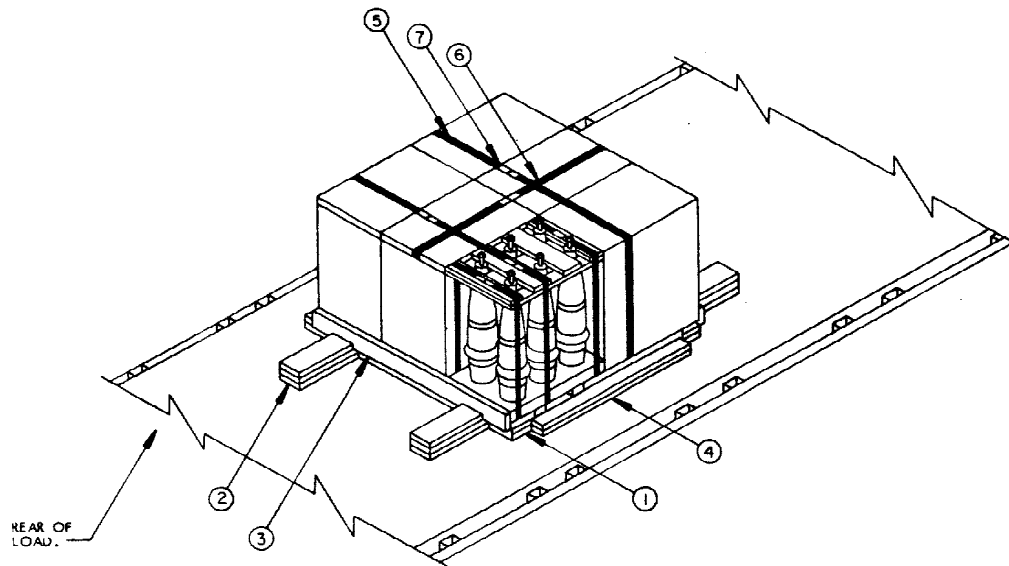
1. A TYPICAL LOAD OF PALLETIZED SEPARATE LOADING PROJECTILES IS SHOWN LOADED ON A SEMITRAILER, 22-1/2 TON, M871, HAVING OVERALL DIMENSIONS OF 29'-10" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE GENERAL NOTE "M" ON PAGE 2.
2. THE 8", 6/PALLET, SEPARATE LOADING PROJECTILE SHOWN IN THE LOAD ON PAGE 26 HAS OVERALL DIMENSIONS OF 19-1/2" LONG BY 28-1/2" WIDE BY 38-1/2" HIGH AND A WEIGHT OF 1,256 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF FOUR (4) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 26. A LOAD CAN BE REDUCED BY ONE (1) UNIT BY USING A "FILLER ASSEMBLY", SHOWN AS PIECE MARKED (3) IN THE LOAD ON PAGE 26. MORE THAN ONE "FILLER ASSEMBLY" CAN BE USED WITHIN A LOAD.
4. FOR AN ALTERNATIVE METHOD OF TRANSPORTING SEPARATE LOADING PROJECTILES SEE THE LOAD ON PAGES 20 THROUGH 25 AND PAGES 28 AND 29. READ THE SPECIAL NOTES PROVIDED AS THE LOADS WILL HAVE TO BE MODIFIED WHEN LOADED ON THE M871 OR M872 SEMITRAILER.
5. IF DESIRED, A "FORWARD BULKHEAD ASSEMBLY" SHOWN AS PIECE MARKED (1) ON PAGES 12 AND 14 MAY BE USED IN LIEU OF THE "FORWARD BLOCKING" SHOWN AS PIECE MARKED (1) IN THE LOAD ON PAGE 26. THE LADING MUST THEN BE POSITIONED AGAINST THE "FORWARD BULKHEAD ASSEMBLY".
6. DUE TO THE "FOUR EYEBOLTS" LOCATED ON THE FORWARD BULKHEAD OF THE M871 SEMITRAILER, FORWARD BLOCKING SHOWN AS PIECE MARKED (1) ON PAGE 26, MUST BE USED. IF DESIRED A "FORWARD BULKHEAD ASSEMBLY" SHOWN AS PIECE MARKED (1) ON PAGE 14 MAY BE USED. IF THE LOAD IS BEING TRANSPORTED ON AN M872 SEMITRAILER A "FORWARD BULKHEAD ASSEMBLY" MUST BE USED DUE TO THE "REINFORCING GUSSETS" POSITIONED ON THE FORWARD BULKHEAD.
7. IF HOLE COVERING PLATES ARE NOT PROVIDED WITH THE VEHICLE SEE THE "ALTERNATIVE HOLE COVERING METHODS" ON PAGE 59.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	14	5
2" X 4"	244	163
2" X 6"	87	87
NAILS	NO. REQD	POUNDS
6d (2")	42	1/4
10d (3")	362	5-3/4
STEEL STRAPPING, 1-1/4" X .035" ----- 132' REQD -----19 LBS		
SEAL FOR 1-1/4" STRAPPING ----- 12 REQD ----- NIL		

LOAD AS SHOWN

<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
PALLETIZED UNIT -----	35 -----	43,960 LBS
OUNNAGE -----		535 LBS
TOTAL WEIGHT -----		44,495 LBS



TYPICAL LTL

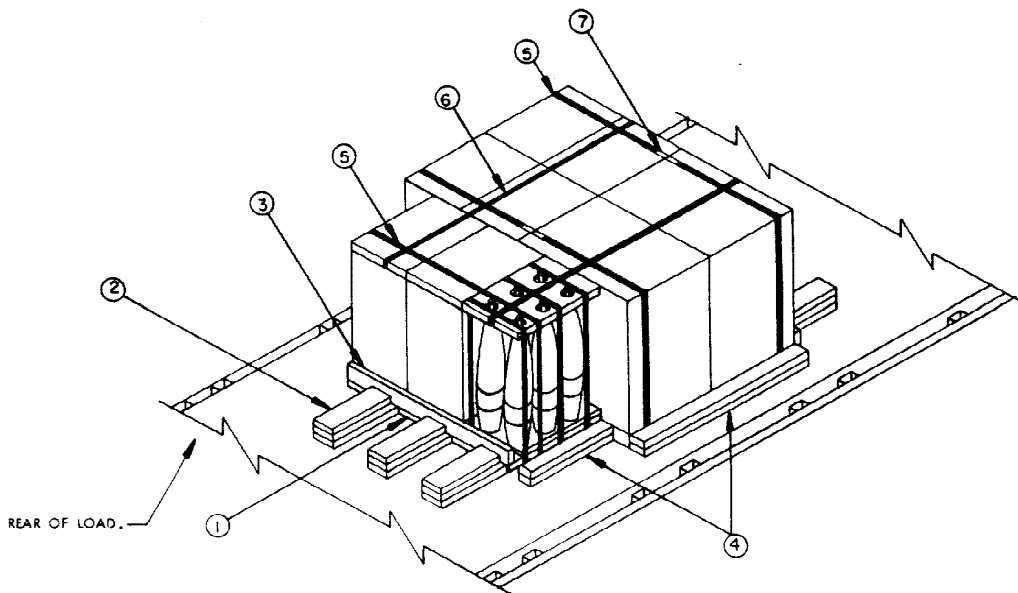
THE 8", 6/PALLET, SLP IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO UNITS OF OTHER DIMENSIONS.

SPECIAL NOTES:

1. A TYPICAL LTL LOAD OF SIX (6) PALLETIZED SEPARATE LOADING PROJECTILES IS SHOWN LOADED ON A SEMITRAILER, STAKE, 12 TON, M127, HAVING OVERALL DIMENSIONS OF 28'-8" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE B BELOW.
2. THE 8", 6/PALLET, SEPARATE LOADING PROJECTILE SHOWN IN THE LOAD ON THIS PAGE HAS OVERALL DIMENSIONS OF 19-1/2" LONG BY 28-1/2" WIDE BY 38-1/2" HIGH AND A WEIGHT OF 1,256 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS.
3. THE LENGTH OF THE BACK-UP PIECES, SHOWN AS PIECE MARKED ② ON THIS PAGE, AND THE NAILS REQUIRED WILL CHANGE PER DIFFERENT LOAD WEIGHTS. LONGER BACK-UP PIECES THAN SHOWN MAY BE USED AND 2" X 4" MATERIAL MAY BE USED IN LIEU OF THE 2" X 6" MATERIAL. SEE "CHART NO. 3" ON PAGE 3 FOR GUIDANCE. NOTE: THE BEARING PIECE, SHOWN AS KEY NUMBER ③, MUST BE POSITIONED ON EDGE AND TIGHT AGAINST THE PALLET BASE PRIOR TO POSITIONING AND NAILING THE TOP BACK-UP CLEAT.
4. IF DESIRED, AND TO MAKE LOADING EASIER, THE HEADERS SHOWN AS KEY NUMBER ① MAY BE WIDER THAN 2" X 6" MATERIAL, PROVIDED THERE IS AT LEAST 3" OF AVAILABLE SURFACE EXTENDING BEYOND THE PALLET OVERHANG. THIS WILL ELIMINATE THE NECESSITY OF PRE-POSITIONING THE HEADERS.
5. SEE "DETAIL B" ON PAGE 35 FOR POSITIONING OF THE BEARING PIECE, HEADER, AND BACK-UP CLEAT, AGAINST THE PALLET BASE.
6. SEE THE "TYPICAL LADING ITEMS" ON PAGE 5 FOR A DETAIL VIEW OF THE 8", 6/PALLET, SLP, SHOWN IN THE LOAD ABOVE.
7. THE LOAD MUST BE POSITIONED OVER THE STRONG POINTS OF THE SEMITRAILER, SUCH AS THE REAR AXLES AND/OR THE FIFTH WHEEL OF THE TOWING VEHICLE.
8. PROCEDURES FOR LOADING AN M871 OR M872 SEMITRAILER:
 - (A.) WHEN USING THE LOADING METHOD SHOWN ON THIS PAGE FOR AN M871 OR M872 SEMITRAILER, THERE MUST BE AT LEAST FOUR INCHES OF AVAILABLE SPACE REMAINING ON EACH SIDE OF THE LOAD TO ALLOW FOR THE NAILED DOWN SIDE BLOCKING PIECES MARKED ④, ON THIS PAGE..
 - (B.) NOTE THAT ON AN M871 SEMITRAILER THE FORWARD 10'-0" LENGTH OF THE TRAILER FLOOR IS ALL STEEL.

KEY NUMBERS

- ① HEADER, 2" X 6" BY LOAD WIDTH (DOUBLED) (2 REQD). PRE-POSITION AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST W/1-20d NAIL EVERY 8". POSITION THE HEADER AT THE FORWARD END OF THE LOAD FIRST. SEE SPECIAL NOTE 4 ON THIS PAGE.
- ② BACK-UP CLEAT, 2" X 6" BY LENGTH-TO-SUIT (TRIPLED) (4 REQD). POSITION THE FIRST PIECE AGAINST THE HEADER AND NAIL TO THE TRAILER FLOOR W/5-12d NAILS. POSITION THE SECOND PIECE AGAINST THE HEADER AND NAIL TO THE FIRST PIECE W/5-20d NAILS. POSITION THE THIRD PIECE AGAINST THE BEARING PIECE AND NAIL TO THE SECOND PIECE W/5-20d NAILS. TOENAIL THE THIRD PIECE TO THE BEARING PIECE W/2-12d NAILS. NOTE: FOR THE LOAD SHOWN ON THIS PAGE THE FIRST AND SECOND PIECE WILL BE 18" LONG AND THE THIRD PIECE WILL BE CUT-TO-FIT. SEE SPECIAL NOTES 3 AND 5 ON THIS PAGE.
- ③ BEARING PIECE, 2" X 4" BY LOAD WIDTH (2 REQD). POSITION AS SHOWN PRIOR TO POSITIONING AND NAILING THE THIRD (TOP) BACK-UP PIECES.
- ④ SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (2 REQD). POSITION THE FIRST PIECE AGAINST THE UNIT SKIDS AND NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER.
- ⑤ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 18'-0" LONG STEEL STRAPPING (2 REQD). INSTALL TO ENCIRCLE THREE (3) Laterally adjacent units as shown.
- ⑥ ANTI-TIP STRAPPING, 1-1/4" X .035" X 10'-0" LONG STEEL STRAPPING (1 REQD). INSTALL AROUND TOP DECK OF TWO LONGITUDINALLY ADJACENT UNITS AS SHOWN.
- ⑦ SEAL FOR 1-1/4" STRAPPING (10 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



TYPICAL LTL

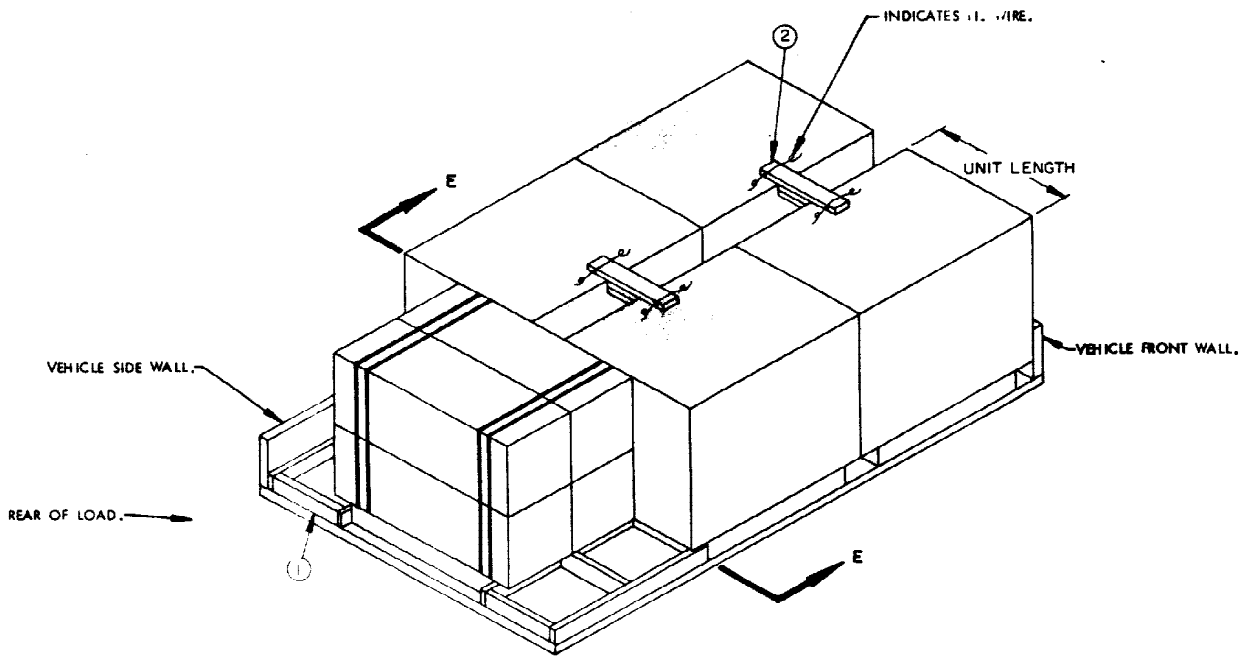
THE 175MM, 6/PALLET, SLP IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO UNITS OF OTHER DIMENSIONS.

SPECIAL NOTES:

1. A TYPICAL LTL LOAD OF ELEVEN (11) PALLETIZED SEPARATE LOADING PROJECTILES IS SHOWN LOADED ON A SEMITRAILER, STAKE, 12 TON, M127 HAVING OVERALL DIMENSIONS OF 28'-8" LONG BY 8'-0" WIDE. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE 8 BELOW.
2. THE 175MM, 6/PALLET, SEPARATE LOADING PROJECTILE SHOWN IN THE LOAD ON THIS PAGE HAS OVERALL DIMENSIONS OF 17" LONG BY 25-1/2" WIDE BY 41" HIGH AND A WEIGHT OF 934 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE LENGTH OF THE BACKUP PIECES, SHOWN AS PIECE MARKED ② ON THIS PAGE, AND THE NAILS REQUIRED WILL CHANGE PER DIFFERENT LOAD WEIGHTS. LONGER BACKUP PIECES THAN SHOWN MAY BE USED AND 2" X 4" MATERIAL MAY BE USED IN LIEU OF THE 2" X 6" MATERIAL. SEE "CHART NO. 3" ON PAGE 3 FOR GUIDANCE. NOTE: THE BEARING PIECE, SHOWN AS KEY NUMBER ③, MUST BE POSITIONED ON EDGE AND TIGHT AGAINST THE PALLET BASE PRIOR TO POSITIONING AND NAILING THE TOP BACK-UP CLEAT.
4. IF DESIRED, AND TO MAKE LOADING EASIER, THE HEADERS SHOWN AS KEY NUMBER ① MAY BE WIDER THAN 2" X 6" MATERIAL, PROVIDED THERE IS AT LEAST 3" OF NAILABLE SURFACE EXTENDING BEYOND THE PALLET OVERHANG. THIS WILL ELIMINATE THE NECESSITY OF PRE-POSITIONING THE HEADERS.
5. SEE "DETAIL B" ON PAGE 55 FOR POSITIONING OF THE BEARING PIECE, HEADER, AND BACK-UP CLEAT, AGAINST THE PALLET BASE.
6. SEE THE "TYPICAL LADING ITEMS" ON PAGE 5 FOR A DETAIL VIEW OF THE 175MM, 6/PALLET, SLP, SHOWN IN THE LOAD ABOVE.
7. THE LOAD MUST BE POSITIONED OVER THE STRONG POINTS OF THE SEMITRAILER, SUCH AS THE REAR AXLES AND/OR THE FIFTH WHEEL OF THE TOWING VEHICLE.
8. PROCEDURES FOR LOADING AN M871 OR M872 SEMITRAILER:
 - (A.) WHEN USING THE LOADING METHOD SHOWN ON THIS PAGE FOR AN M871 OR AN M872 SEMITRAILER, THERE MUST BE AT LEAST FOUR INCHES OF NAILABLE SPACE REMAINING ON EACH SIDE OF THE LOAD TO ALLOW FOR THE NAILED DOWN SIDE BLOCKING PIECES MARKED ④, ON THIS PAGE.
 - (B.) NOTE THAT ON AN M871 SEMITRAILER THE FORWARD 10'-0" LENGTH OF THE TRAILER FLOOR IS ALL STEEL.

KEY NUMBERS

- ① HEADER, 2" X 6" BY LOAD WIDTH (DOUBLED) (2 REQD). PRE-POSITION AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST W/1-20d NAIL EVERY 8". POSITION THE HEADER AT THE FORWARD END OF THE LOAD FIRST. SEE SPECIAL NOTE 4 ON THIS PAGE.
- ② BACK-UP CLEAT, 2" X 6" BY LENGTH-TO-SUIT (TRI-LED) (6 REQD). POSITION THE FIRST PIECE AGAINST THE HEADER AND NAIL TO THE TRAILER FLOOR W/5-12d NAILS. POSITION THE SECOND PIECE AGAINST THE HEADER AND NAIL TO THE FIRST PIECE W/5-20d NAILS. POSITION THE THIRD PIECE AGAINST THE BEARING PIECE AND NAIL TO THE SECOND PIECE W/5-20d NAILS. TO NAIL THE THIRD PIECE TO THE BEARING PIECE W/2-12d NAILS. NOTE: THE LOAD SHOWN ON THIS PAGE THE FIRST AND SECOND PIECE WILL BE 18" LONG AND THE THIRD PIECE WILL BE CUT-TO-FIT. SEE SPECIAL NOTES 3 AND 5 ON THIS PAGE.
- ③ BEARING PIECE, 2" X 4" BY LOAD WIDTH (2 REQD). POSITION AS SHOWN PRIOR TO POSITIONING AND NAILING THE THIRD (TOP) BACK-UP PIECES.
- ④ SIDE BLOCKING, 2" X 4" BY LENGTH-TO-SUIT (DOUBLED) (4 REQD). POSITION THE FIRST PIECE AGAINST THE UNIT SKIDS AND NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST PIECE IN A LIKE MANNER.
- ⑤ ANTI-SWAY STRAPPING, 1-1/4" X .035" X 20'-0" LONG STEEL STRAPPING (3 REQD). INSTALL TO ENCIRCLE LATERALLY ADJACENT UNITS AS SHOWN.
- ⑥ ANTI-TIP STRAPPING, 1-1/4" X .035" X 14'-0" LONG STEEL STRAPPING (2 REQD). INSTALL AROUND TOP DECK OF THREE (3) LONGITUDINALLY ADJACENT UNITS AS SHOWN.
- ⑦ SEAL FOR 1-1/4" STRAPPING (10 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.

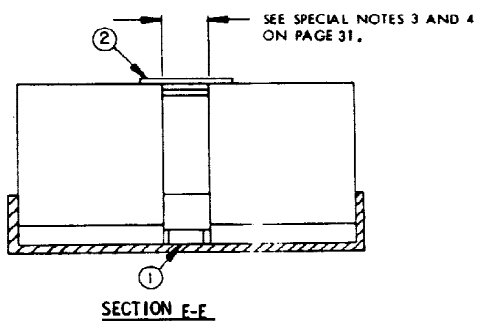


ISOMETRIC VIEW

A SKIDDED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED SKIDDED UNITS.

KEY NUMBERS

- ① SPACER ASSEMBLY (4 REQD). SEE THE "SPACER ASSEMBLY A" DETAIL ON PAGE 54. SEE SPECIAL NOTE 4 ON PAGE 31.
- ② TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 54. WIRE TIE TO A UNIT UNITIZING STRAP WITH NO. 14 GAGE WIRE AS SHOWN BY THE "POSITIONING OF TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLY" ON PAGE 54. SEE SPECIAL NOTE 3 ON PAGE 31.



TRUCK, CARGO, 2-1/2 TON, M35 (TYPICAL)

SPECIAL NOTES:

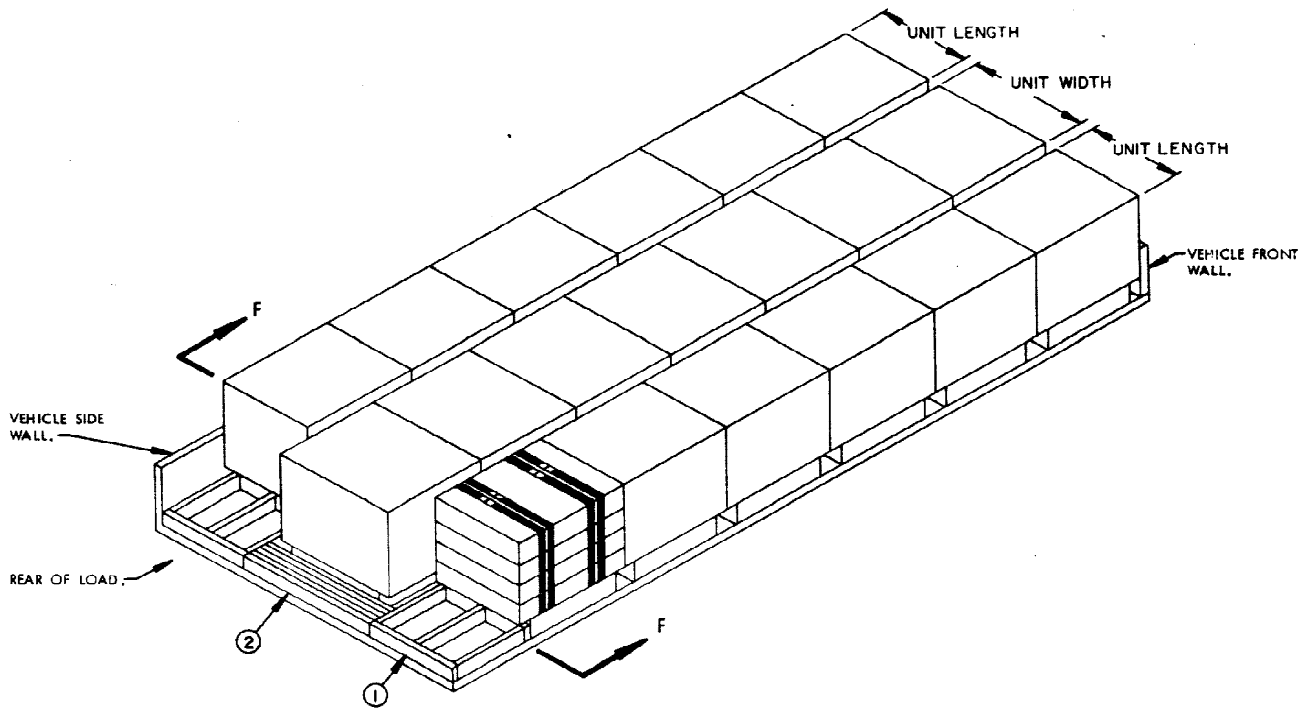
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A SKIDDED BASE IS SHOWN LOADED IN A TRUCK, CARGO, 2-1/2 TON, M35, HAVING INSIDE DIMENSIONS OF 12'-3" LONG BY 7'-4" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE SKIDDED UNIT SHOWN IN THE TYPICAL 2-WIDE LOAD ON PAGE 30 HAS OVERALL DIMENSIONS OF 38" LONG BY 53" WIDE BY 45" HIGH AND A WEIGHT OF 1,280 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR SKIDDED UNITS OF OTHER DIMENSIONS, AND PALLETIZED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. TOP-OF-LOAD ANTI-SWAY BRACES, SHOWN IN THE LOAD VIEW AS PIECE MARKED (2), ARE TO BE POSITIONED BETWEEN ALL Laterally ADJACENT UNITS WHICH ARE OVER 44" HIGH. NOTE: TOP-OF-LOAD ANTI-SWAY BRACES ARE NOT REQUIRED IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE IS 6" OR LESS.
4. SPACER ASSEMBLIES, SHOWN AS PIECES MARKED (1) IN THE LOAD ON PAGE 22, MUST BE POSITIONED AT THE SIDES OF THE SINGLE UNIT AT THE REAR OF THE LOAD AND BETWEEN EACH TWO (2) Laterally ADJACENT UNITS AT THE FORWARD END OF THE LOAD. NOTE: SPACER ASSEMBLIES ARE NOT REQUIRED BETWEEN EACH TWO (2) Laterally ADJACENT UNITS AT THE FORWARD END OF THE LOAD IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE IS 6" OR LESS.
5. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. IF THE UNIT AT THE REAR OF THE LOAD IS OMITTED, USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 36.
6. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3", NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12", USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12" USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 36.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	45	30
NAILS	NO. REQD	POUNDS
10d (3")	54	1
WIRE, NO. 14 GAGE ----- 20' REQD -----		1 LB

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
SKIDDED UNIT -----	5 -----	6,400 LBS
DUNNAGE -----		62 LBS
TOTAL WEIGHT -----		6,462 LBS

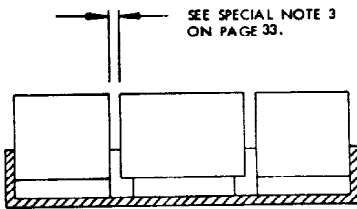


ISOMETRIC VIEW

THE LOAD PROCEDURES DEPICTED ARE APPLICABLE TO SKIDDED UNITS ONLY.

KEY NUMBERS

- ① REAR BLOCKING ASSEMBLY (2 REQD.). SEE THE "REAR BLOCKING ASSEMBLY A" DETAIL ON PAGE 55. SEE SPECIAL NOTE 5 ON PAGE 33.
- ② SOLID FILL, 4" WIDE BY LENGTH AND THICKNESS TO SUIT (AS REQUIRED TO FILL THE VOID AT THE REAR OF THE LOAD). POSITION ON EDGE AND LAMINATE EACH PIECE TO AN ADJACENT PIECE W/1-10d NAIL EVERY 12". SEE SPECIAL NOTE 5 ON PAGE 33.



SECTION F-F

SPECIAL NOTES:

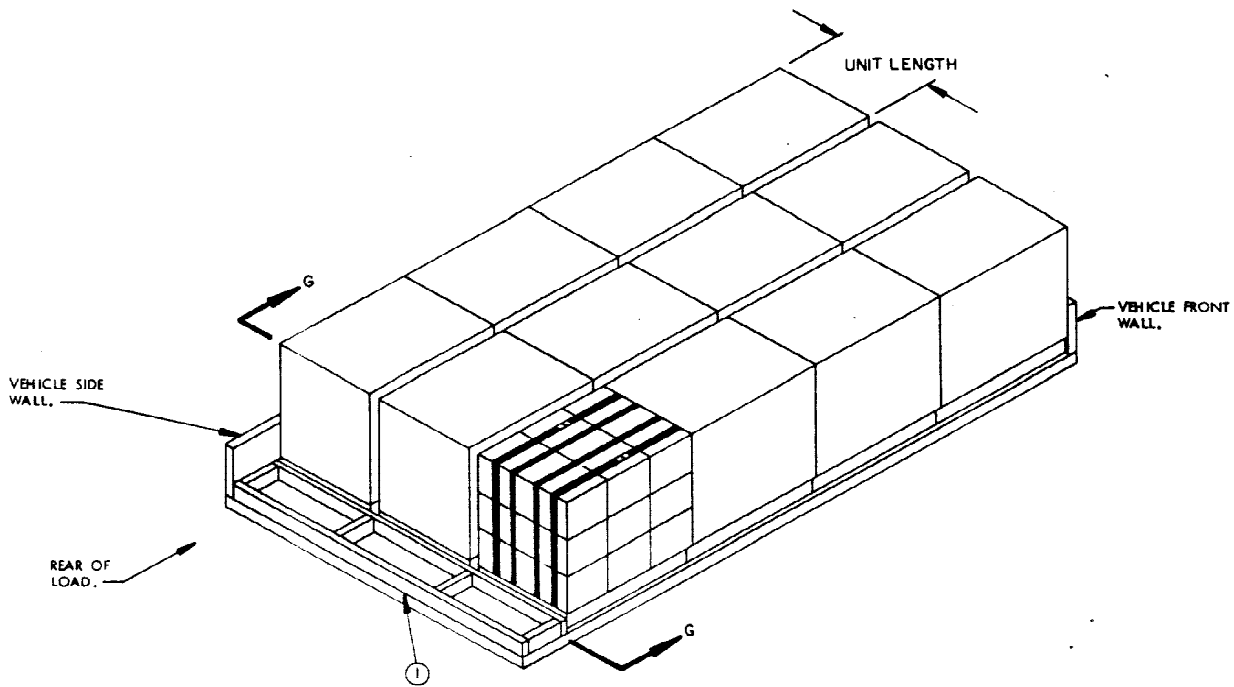
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A SKIDDED BASE IS SHOWN LOADED IN A TRUCK, CARGO, 2-1/2 TON, M36, HAVING INSIDE DIMENSIONS OF 17'-7" LONG BY 7'-4" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE SKIDDED UNIT SHOWN IN THE TYPICAL 3-WIDE LOAD ON PAGE 32 HAS OVERALL DIMENSIONS OF 25" LONG BY 32" WIDE BY 29" HIGH AND A WEIGHT OF 320 POUNDS. THE DEPICTED PROCEDURES ARE ONLY APPLICABLE TO SKIDDED UNITS. FOR MORE GUIDANCE IN POSITIONING 3-WIDE SEE THE LOAD ON PAGE 34, AND "CHART NO. 1" ON PAGE 3. SEE GENERAL NOTE "F" ON PAGE 2.
3. IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE WIDTH IS GREATER THAN 6", SPACER ASSEMBLIES SHOWN AS PIECE MARKED ① ON PAGE 30 WILL BE REQUIRED. IF THE EXCESS SPACE IS GREATER THAN 6" AND THE UNIT HEIGHT IS GREATER THAN 44", "TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLIES" SHOWN AS PIECES MARKED ② IN THE LOAD ON PAGE 30, WILL BE REQUIRED.
4. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED.
5. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3" NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12", USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12", USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 36.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	34	23
NAILS	NO. REQD	POUNDS
10d (3")	44	3/4

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
SKIDDED UNIT -----	19 -----	9,880 LBS
DUNNAGE -----		47 LBS
TOTAL WEIGHT -----		9,927 LBS

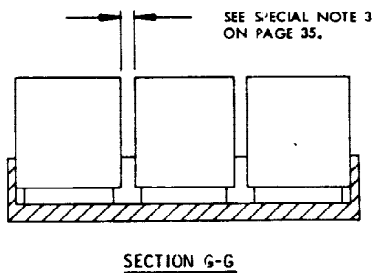


ISOMETRIC VIEW

THE LOAD PROCEDURES DEPICTED ARE APPLICABLE TO SKIDDED UNITS ONLY.

KEY NUMBER

- ① REAR BLOCKING ASSEMBLY (1 REQD). SEE THE "REAR BLOCKING ASSEMBLY B" DETAIL ON PAGE 35. SEE SPECIAL NOTE 5 ON PAGE 35.



SECTION G-G

TRUCK, CARGO, 5 TON, M54 (TYPICAL)

SPECIAL NOTES:

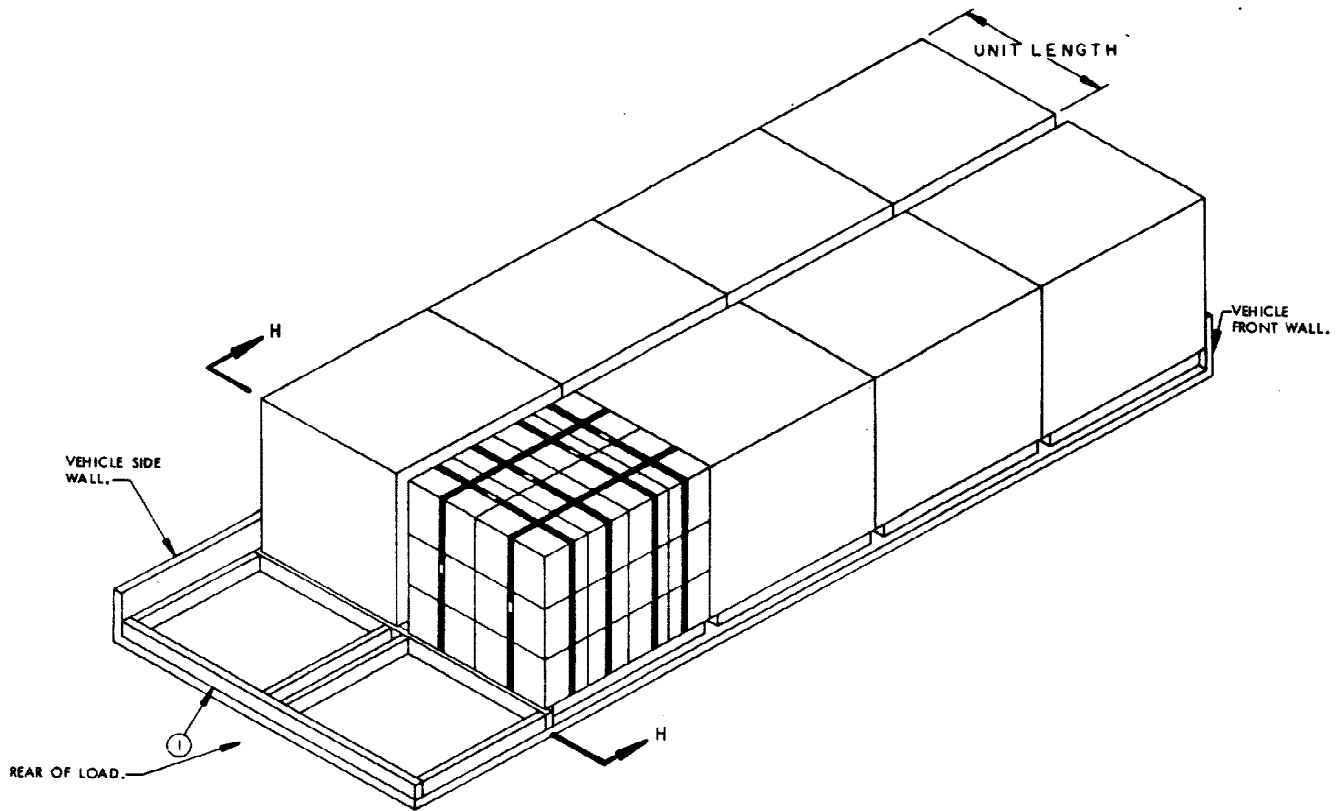
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A SKIDDED BASE IS SHOWN LOADED IN A TRUCK, CARGO, 5 TON, M54, HAVING INSIDE DIMENSIONS OF 14'-0" LONG BY 7'-4" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE SKIDDED UNIT SHOWN IN THE TYPICAL 3-WIDE LOAD ON PAGE 34 HAS OVERALL DIMENSIONS OF 38-1/4" LONG BY 27-1/4" WIDE BY 35-3/4" HIGH AND A WEIGHT OF 760 POUNDS. THE DEPICTED PROCEDURES ARE ONLY APPLICABLE TO SKIDDED UNITS HAVING A LENGTH OF 25" TO 29-1/4" OR A WIDTH OF 27" TO 29-1/4". FOR MORE GUIDANCE IN POSITIONING 3-WIDE, SEE THE LOAD ON PAGE 32, AND "CHART NO. 1" ON PAGE 3. SEE GENERAL NOTE "F" ON PAGE 2.
3. IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE WIDTH IS GREATER THAN 6", SPACER ASSEMBLIES SHOWN AS PIECE MARKED ① ON PAGE 30, WILL BE REQUIRED. IF THE EXCESS SPACE IS GREATER THAN 6" AND THE UNIT HEIGHT IS GREATER THAN 44", "TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLIES" SHOWN AS PIECES MARKED ② IN THE LOAD ON PAGE 30, WILL BE REQUIRED.
4. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED.
5. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3" NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12" USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12", USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 34.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	19	13
NAILS	NO. REQD	POUNDS
10d (3")	16	1/4

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
SKIDDED UNIT	12	9,120 LBS
DUNNAGE		27 LBS
TOTAL WEIGHT		9,147 LBS

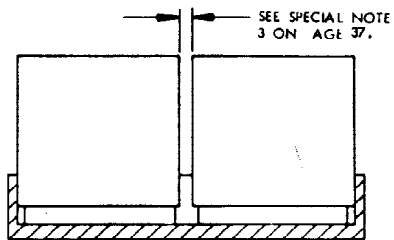


ISOMETRIC VIEW

A PALLETIZED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED OR SKIDDED UNITS.

KEY NUMBER

- ① REAR BLOCKING ASSEMBLY (1 REQD). SEE THE "REAR BLOCKING ASSEMBLY B" DETAIL ON PAGE 55. SEE SPECIAL NOTE 5 ON PAGE 37.



SECTION H-H

SPECIAL NOTES:

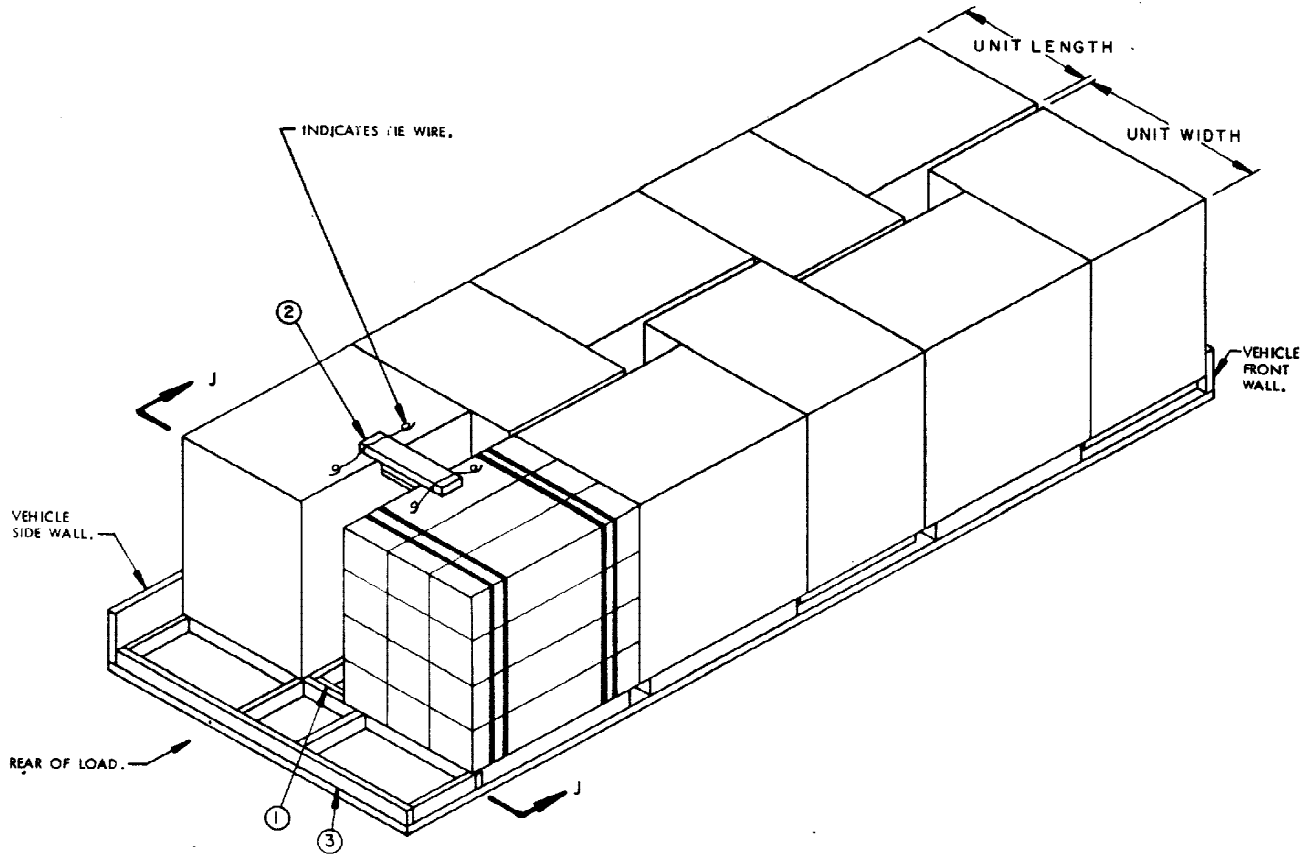
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED IN A TRUCK, CARGO, 5 TON, M55, HAVING INSIDE DIMENSIONS OF 20'-4" LONG BY 7'-4" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL 2-WIDE LOAD ON PAGE 36 HAS OVERALL DIMENSIONS OF 42-1/2" LONG BY 50-1/2" WIDE BY 47" HIGH AND A WEIGHT OF 1,372 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS, AND SKIDDED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE WIDTH IS GREATER THAN 6", SPACER ASSEMBLIES SHOWN AS PIECE MARKED ① ON PAGE 30, WILL BE REQUIRED. IF THE EXCESS SPACE IS GREATER THAN 6" AND THE UNIT HEIGHT IS GREATER THAN 44", "TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLIES" SHOWN AS PIECES MARKED ② IN THE LOAD ON PAGE 30, WILL BE REQUIRED.
4. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED.
5. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3" NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12", USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12", USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 36.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	28	19
NAILS	NO. REQD	POUNDS
10d (3")	16	1/4

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNIT	8	10,976 LBS
DUNNAGE		39 LBS
TOTAL WEIGHT		11,015 LBS

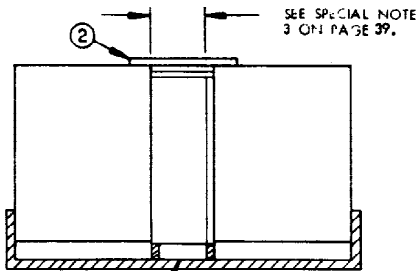


ISOMETRIC VIEW

A SKIDDED UNIT IS DEPICTED. THE LOAD PROCEDURES ARE ONLY APPLICABLE TO SKIDDED UNITS OR ITEMS ASSEMBLED ON THE 35" X 45-1/2" PALLET.

KEY NUMBERS

- ① SPACER ASSEMBLY (1 REQD). SEE THE "SPACER ASSEMBLY A" DETAIL ON PAGE 54. SEE SPECIAL NOTE 3 ON PAGE 39.
- ② TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 54. WIRE TIE TO A UNIT UNITIZING STRAP WITH NO. 14 GAGE WIRE AS SHOWN BY THE "POSITIONING OF TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLY" ON PAGE 54. SEE SPECIAL NOTE 3 ON PAGE 39.
- ③ REAR BLOCKING ASSEMBLY (1 REQD). SEE THE "REAR BLOCKING ASSEMBLY B" DETAIL ON PAGE 55. SEE SPECIAL NOTE 5 ON PAGE 39.



SECTION J-J

SPECIAL NOTES:

1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A SKIDDED BASE IS SHOWN IN A TRUCK, CARGO, 5 TON, M55, HAVING INSIDE DIMENSIONS OF 20'-4" LONG BY 7'-4" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE SKIDDED UNIT SHOWN IN THE TYPICAL CHIMNEY PATTERN LOAD ON PAGE 38 HAS OVERALL DIMENSIONS OF 36" LONG BY 51" WIDE BY 54" HIGH AND A WEIGHT OF 1,990 POUNDS. THE DEPICTED PROCEDURES ARE ONLY APPLICABLE TO SKIDDED UNITS, AND ITEMS ASSEMBLED ON THE 35" X 45-1/2" PALLET. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE WIDTH IS GREATER THAN 6", SPACER ASSEMBLIES SHOWN AS PIECE MARKED ① ON PAGE 38, WILL BE REQUIRED. IF THE EXCESS SPACE IS GREATER THAN 6" AND THE UNIT HEIGHT IS GREATER THAN 44", "TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLIES" SHOWN AS PIECES MARKED ② IN THE LOAD ON PAGE 38, WILL BE REQUIRED.
4. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED.
5. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3", NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12", USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12", USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 38.
6. A CHIMNEY-PATTERN LOAD IS SHOWN ON PAGE 38. FOR AN ALTERNATIVE METHOD SEE THE LOAD ON PAGE 30.

BILL OF MATERIAL

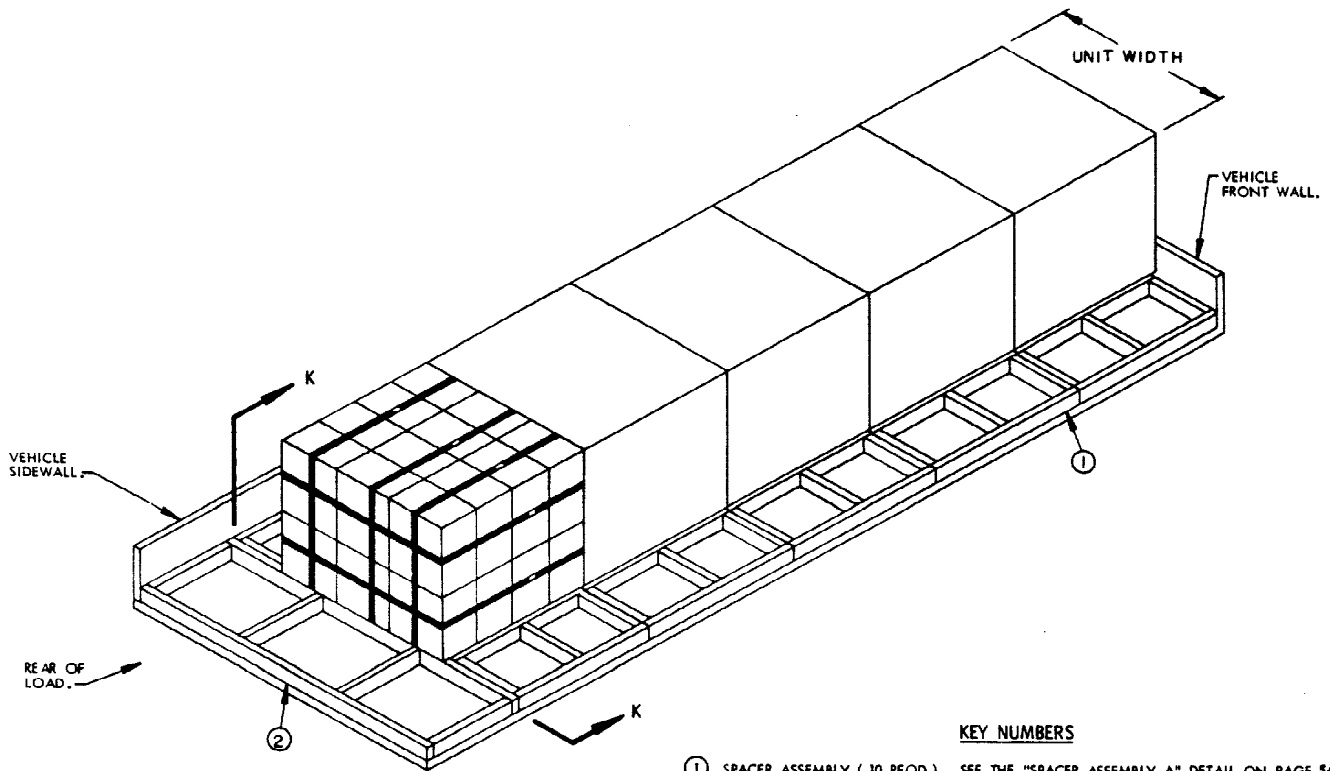
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	36	24
NAILS	NO. REQD	POUNDS
10d (3")	36	3/4
WIRE, NO. 14 GAGE	12' REQD	1/2 LB

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
SKIDDED UNIT	10	19,900 LBS
DUNNAGE		50 LBS
TOTAL WEIGHT		19,950 LBS

TRUCK, CARGO, 5 TON, M55 (TYPICAL)

PAGE 39

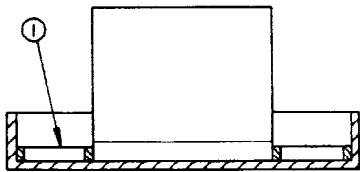


ISOMETRIC VIEW

A PALLETIZED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED OR SKIDDED UNITS.

KEY NUMBERS

- ① SPACER ASSEMBLY (10 REQD). SEE THE "SPACER ASSEMBLY A" DETAIL ON PAGE 54.
- ② REAR BLOCKING ASSEMBLY (1 REQD), SEE THE "REAR BLOCKING ASSEMBLY B" DETAIL ON PAGE 55. SEE SPECIAL NOTE 4 ON PAGE 41.



SECTION K-K

SPECIAL NOTES:

1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED IN A TRUCK, CARGO, 5 TON, M55, HAVING INSIDE DIMENSIONS OF 20'-4" LONG BY 7'-4" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL 1-WIDE LOAD ON PAGE 40 HAS OVERALL DIMENSIONS OF 44" LONG BY 48" WIDE BY 42-1/2" HIGH AND A WEIGHT OF 1,996 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS AND SKIDDED UNITS. NOTE: UNITS WHICH ARE 44" LONG OR GREATER WILL NOT FIT 2-WIDE AND MUST BE LOADED AS SHOWN ON PAGE 40. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED.
4. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3" NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12" USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12" USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 40.

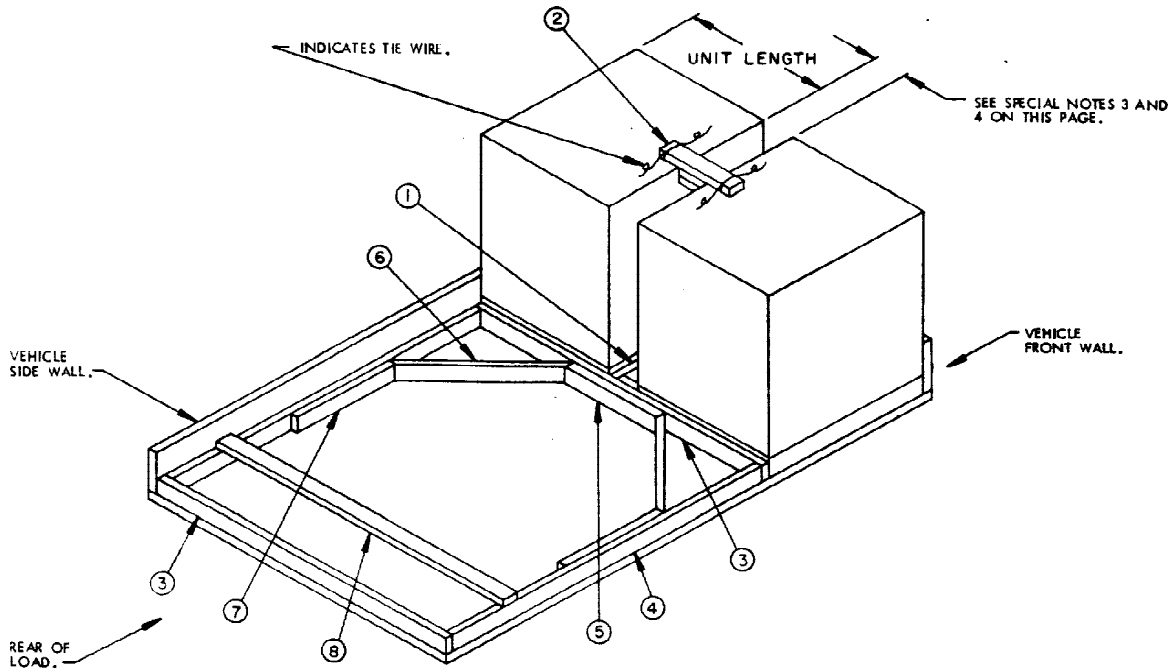
BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	136	91
NAILS	NO. REQD	POUNDS
10d (3")	136	2-1/4

LOAD AS SHOWN

<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
PALLETIZED UNIT -----	5 -----	9,980 LBS
DUNNAGE -----	-----	185 LBS
TOTAL WEIGHT -----	-----	10,165 LBS

TRUCK, CARGO, 5 TON, M55 (TYPICAL)



TYPICAL LTL

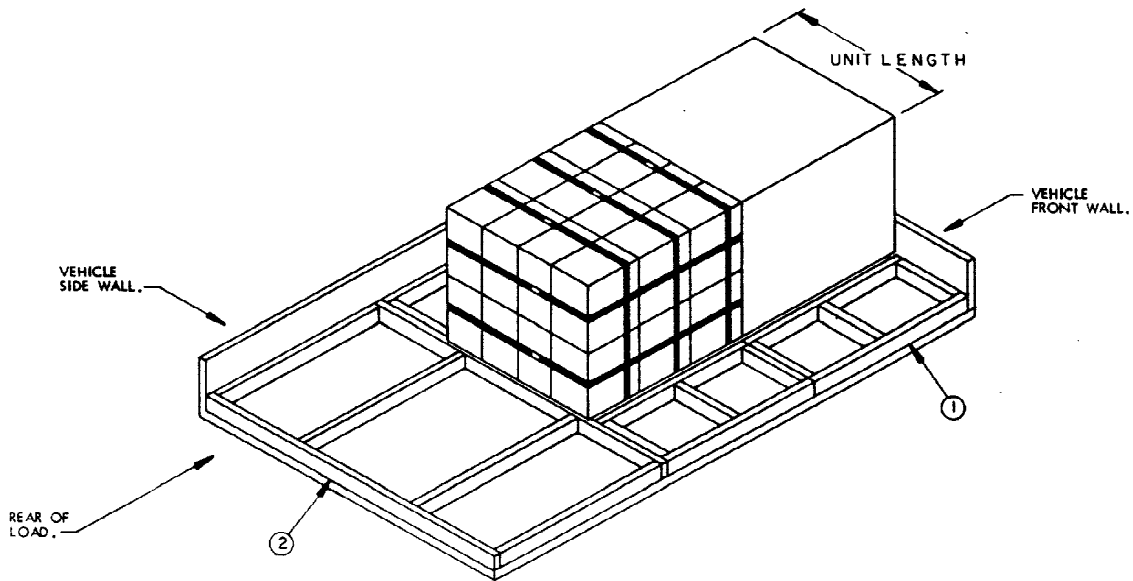
A PALLETIZED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED OR SKIDDED UNITS.

KEY NUMBERS

SPECIAL NOTES:

1. A TYPICAL LTL LOAD OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED IN A TRUCK, CARGO, 2-1/2 TON, M35, HAVING INSIDE DIMENSIONS OF 12'-3" LONG BY 7'-4" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL LTL LOAD ON THIS PAGE HAS OVERALL DIMENSIONS OF 40" LONG BY 48" WIDE BY 50-1/2" HIGH AND A WEIGHT OF 1,784 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS AND SKIDDED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. TOP-OF-LOAD ANTI-SWAY BRACES, SHOWN IN THE LOAD VIEW AS PIECE MARKED ②, ARE TO BE POSITIONED BETWEEN ALL LATERALLY ADJACENT UNITS WHICH ARE OVER 44" HIGH. NOTE: TOP-OF-LOAD ANTI-SWAY BRACES ARE NOT REQUIRED IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE IS 6" OR LESS.
4. SPACER ASSEMBLIES, SHOWN AS PIECES MARKED ①, MUST BE POSITIONED BETWEEN EACH TWO (2) LATERALLY ADJACENT UNITS. NOTE: SPACER ASSEMBLIES ARE NOT REQUIRED IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE IS 6" OR LESS.
5. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED.
6. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 8'-0" USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 36.
7. ALL LTL LOADS, REGARDLESS OF THEIR SIZE, REQUIRE ONE STRUT BRACE POSITIONED NEAR THE REAR OF THE TRUCK AND NAILED TO THE SIDE STRUTS. IF THE SIDE STRUTS, PIECES MARKED ④, ARE LONGER THAN 7'-0", AN ADDITIONAL STRUT BRACE, PIECE MARKED ⑧, MUST BE APPLIED FOR EVERY 7'-0" OF SIDE STRUT LENGTH.
8. THE "K-BRACE" BLOCKING, SHOWN AS PIECES MARKED ③ THRU ⑤, IS ADEQUATE FOR RETAINING A MAXIMUM LTL LOAD.
9. DEPENDING ON THE NUMBER OF UNITS BEING LOADED, EACH OF THE SIDE STRUTS, PIECES MARKED ④, MAY NEED TO BE FORMED FROM MORE THAN ONE PIECE OF MATERIAL. IF SUCH IS THE CASE, THE SIDE STRUTS MUST BE SPLICED. SPLICING CAN BE ACCOMPLISHED BY CENTERING A 2" X 4" X 24" PIECE ON THE JOINT OF THE SIDE STRUTS AND NAILING IT TO THE SIDE STRUTS W/4-10d NAILS AT EACH END.

- ① SPACER ASSEMBLY (1 REQD). SEE THE "SPACER ASSEMBLY A" DETAIL ON PAGE 54. SEE SPECIAL NOTE 4 ON THIS PAGE.
- ② TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 54. WIRE TIE TO A UNIT UNITIZING STRAP WITH NO. 14 GAGE WIRE AS SHOWN BY THE "POSITIONING OF TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLY" ON PAGE 54. SEE SPECIAL NOTE 3 ON THIS PAGE.
- ③ HEADER, 2" X 4" BY TRUCK WIDTH MINUS 1/2" IN LENGTH (2 REQD).
- ④ SIDE STRUT, 2" X 4" BY CUT-TO-FIT BETWEEN THE FORWARD AND REAR HEADERS, PIECES MARKED ③, (2 REQD). TOENAIL TO THE HEADERS W/2-12d NAILS AT EACH END. SEE SPECIAL NOTE 9 ON THIS PAGE.
- ⑤ CENTER CLEAT, 2" X 4" X 30" (1 REQD). NAIL TO A HEADER, PIECE MARKED ③, W/7-10d NAILS.
- ⑥ DIAGONAL BRACE, 2" X 4" BY CUT-TO-FIT (2 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT A 45° ANGLE AS SHOWN AND TOENAIL TO A HEADER AND A SIDE STRUT, PIECES MARKED ③ AND ④, W/2-16d NAILS AT EACH END.
- ⑦ SIDE CLEAT, 2" X 4" X 30" (2 REQD). NAIL TO A SIDE STRUT, PIECE MARKED ④, W/8-10d NAILS.
- ⑧ STRUT BRACE, 2" X 4" BY TRUCK WIDTH MINUS 1/2" IN LENGTH (MINIMUM OF ONE REQUIRED). POSITION NEAR REAR OF TRUCK AND NAIL TO THE SIDE STRUTS, PIECES MARKED ④, W/2-12d NAILS AT EACH END. SEE SPECIAL NOTE 7 ON THIS PAGE.



TYPICAL LTL

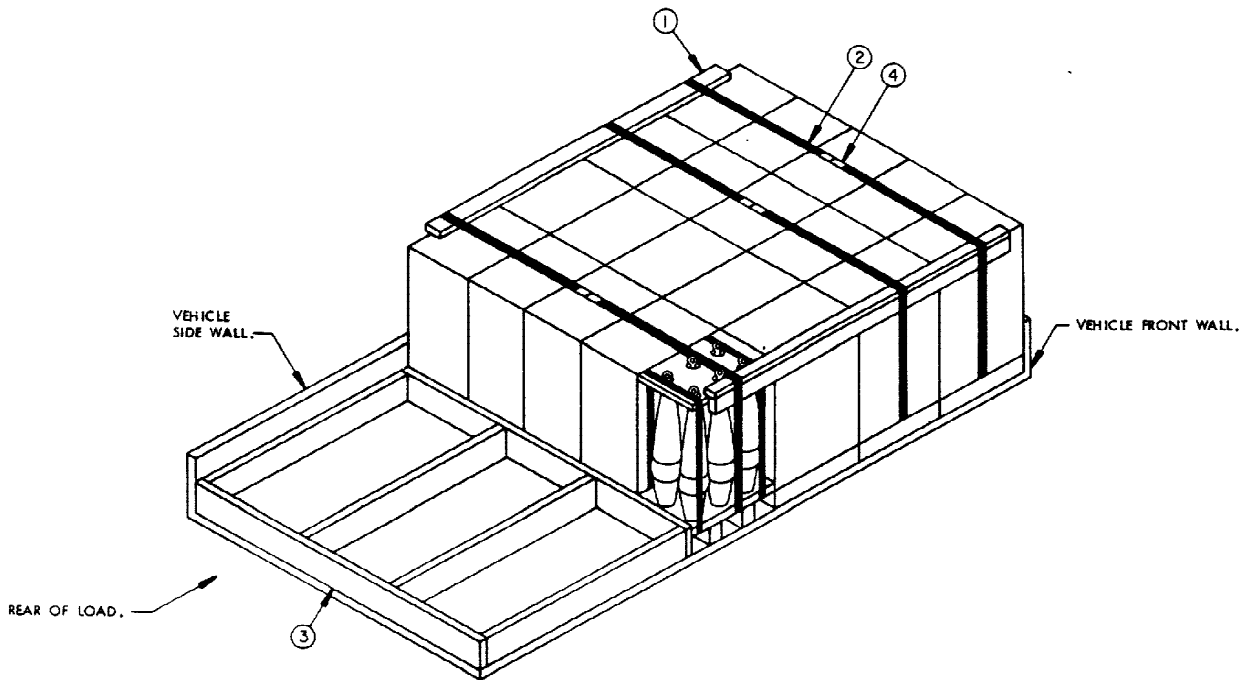
A PALLETIZED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED OR SKIDDED UNITS.

KEY NUMBERS

- ① SPACER ASSEMBLY (4 REQD). SEE THE "SPACER ASSEMBLY A" DETAIL ON PAGE 54.
- ② REAR BLOCKING ASSEMBLY (1 REQD). SEE THE "REAR BLOCKING ASSEMBLY B" DETAIL ON PAGE 55. SEE SPECIAL NOTE 4 ON THIS PAGE.

SPECIAL NOTES:

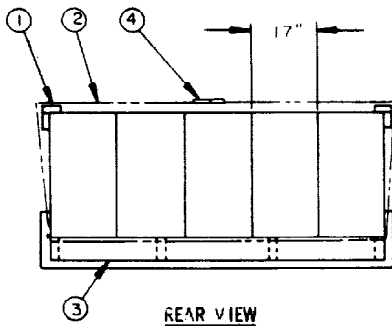
1. A TYPICAL LTL LOAD OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED IN A TRUCK, CARGO, 2-1/2 TON, M35, INCLUDING INSIDE DIMENSIONS OF 12'-3" LONG BY 7'-4" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL LTL LOAD ON THIS PAGE HAS OVERALL DIMENSIONS OF 44" LONG BY 48" WIDE BY 42-1/2" HIGH AND A WEIGHT OF 1,996 POUNDS. THE DEPICTED PROCEDURES ARE APPLICABLE FOR UNITS WHICH CAN NOT BE POSITIONED TWO (2) WIDE ACROSS THE VEHICLE WIDTH DUE TO THE SIZE OF THE UNIT. HOWEVER, THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS AND SKIDDED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED.
4. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3" NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12" USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12" USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 36.



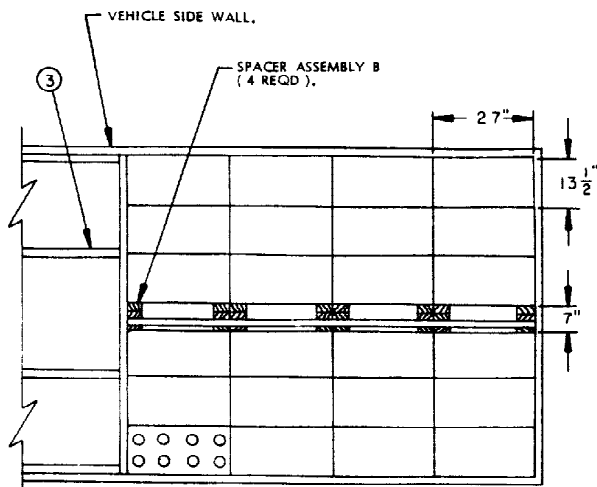
THE 175MM, 6/PALLET, SLP IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO UNITS OF OTHER DIMENSIONS.

KEY NUMBERS

- ① ANTI-SWAY ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 54.
- ② ANTI-SWAY STRAPPING, 1-1/4" X .085" X 24'-0" LONG STEEL STRAPPING (3 REQD). INSTALL TO ENCIRCLE FIVE (5) Laterally ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN.
- ③ REAR BLOCKING ASSEMBLY (1 REQD). SEE THE "REAR BLOCKING ASSEMBLY B" DETAIL ON PAGE 55. SEE SPECIAL NOTE 4 ON PAGE 45.
- ④ SEAL FOR 1-1/4" STRAPPING (6 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



TRUCK, CARGO, 5 TON, M54 (TYPICAL)



PARTIAL PLAN VIEW

THE PARTIAL PLAN VIEW SHOWN ABOVE DEPICTS THE PROCEDURES TO BE USED WHEN THE EXCESS SPACE ACROSS THE VEHICLE WIDTH IS 6" OR GREATER. A LOAD OF 175MM, 6/PALLET, SLP IS SHOWN IN A TRUCK, CARGO, 5 TON, M54 AS A TYPICAL LOAD. KEY NUMBERS ① THROUGH ④ SHOWN IN THE LOAD ON PAGE 44 AND FOUR (4) "SPACER ASSEMBLY B" DETAILS, AS SHOWN ABOVE, ARE REQUIRED. SEE THE "SPACER ASSEMBLY B" DETAIL ON PAGE 56.

SPECIAL NOTES:

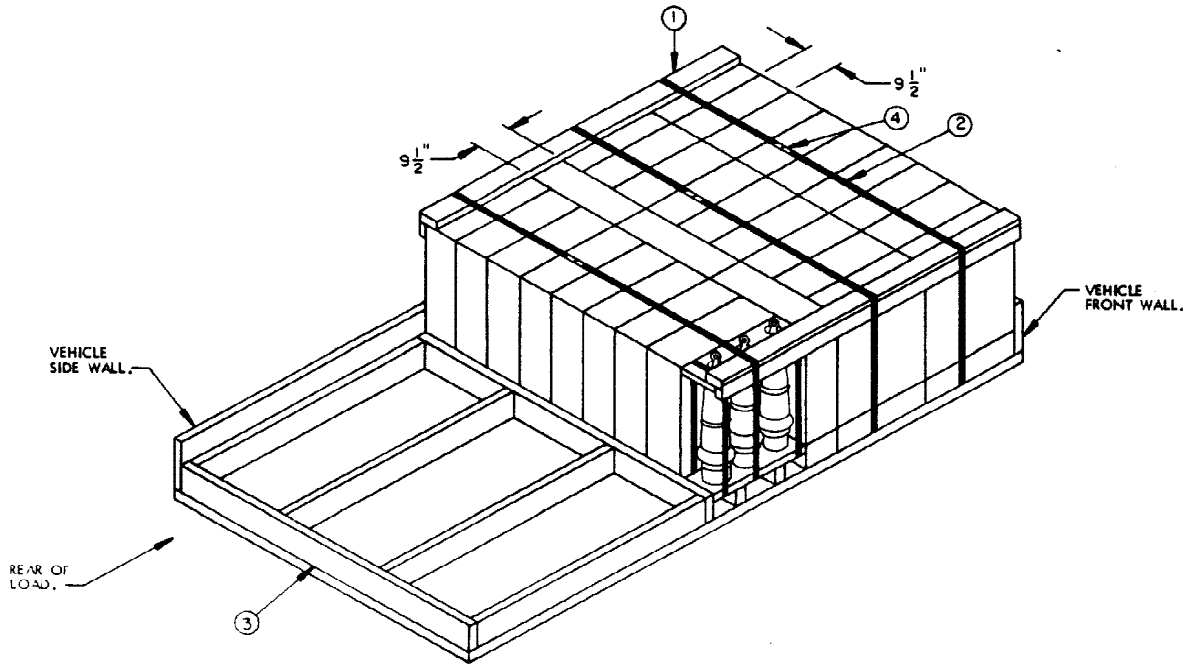
1. A TYPICAL LOAD OF PALLETIZED SEPARATE LOADING PROJECTILES IS SHOWN LOADED IN A TRUCK, CARGO, 5 TON, M54, HAVING INSIDE DIMENSIONS OF 14'-0" LONG BY 7'-4" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE 175MM, 6/PALLET, SEPARATE LOADING PROJECTILE SHOWN IN THE LOAD ON PAGE 44 HAS OVERALL DIMENSIONS OF 17" LONG BY 25-1/2" WIDE BY 41" HIGH AND A WEIGHT OF 934 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS. IF SHIPPING THE 155MM, 8/PALLET, SEE THE "PARTIAL PLAN VIEW" ON THIS PAGE. IF SHIPPING THE 8", 3/PALLET OR 8", 6/PALLET, SEE THE PROCEDURES ON PAGES 46 AND 47. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF FIVE (5) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 44, A LOAD CAN BE REDUCED BY ONE (1) OR MORE PALLET UNITS BY USING A "FILLER ASSEMBLY" AS SHOWN ON PAGE 52 IN LIEU OF EACH OMITTED PALLET.
4. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3", NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12", USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12", USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 44.
5. SEE THE "TYPICAL LADING ITEMS" ON PAGE 5 FOR A DETAIL VIEW OF THE 175MM, 6/PALLET, SLP, SHOWN IN THE LOAD ON PAGE 44.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	32	22
2" X 6"	36	36
NAILS	NO. REQD	POUNDS
10d (3")	50	1
STEEL STRAPPING, 1-1/4" X .035" ----	72' REQD -----	11 LBS
SEAL FOR 1-1/4" STRAPPING -----	6 REQD -----	NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
175MM, SLP -----	20 -----	18,680 LBS
DUNNAGE -----		128 LBS
TOTAL WEIGHT -----		18,808 LBS

TRUCK, CARGO, 5 TON, M54 (TYPICAL)

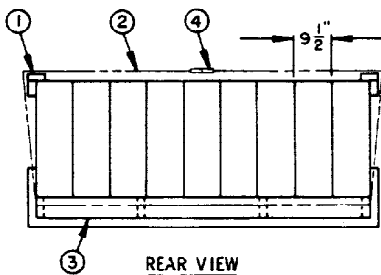


ISOMETRIC VIEW

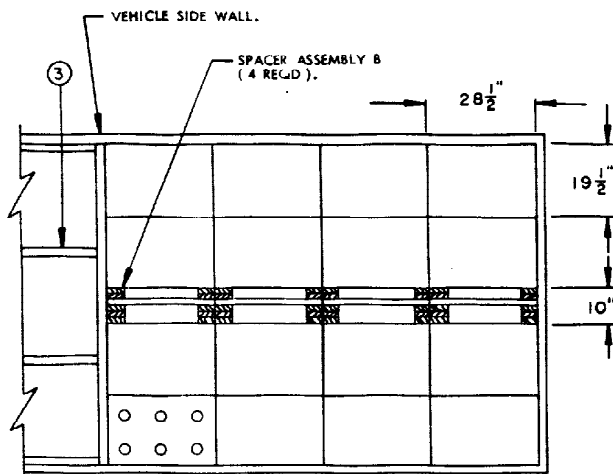
THE 8" 3/PALLET, SLP IS DEPICTED, HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO UNITS OF OTHER DIMENSIONS.

KEY NUMBERS

- ① ANTI-SWAY ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 54.
- ② ANTI-SWAY STRAPPING, 1-1/4" X .035" X 24'-0" LONG STEEL STRAPPING (3 REQD). INSTALL TO ENCIRCLE NINE (9) LATERALLY ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN.
- ③ REAR BLOCKING ASSEMBLY (1 REQD). SEE THE "REAR BLOCKING ASSEMBLY B" DETAIL ON PAGE 55. SEE SPECIAL NOTE 4 ON PAGE 47.
- ④ SEAL FOR 1-1/4" STRAPPING (6 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



REAR VIEW



PARTIAL PLAN VIEW

THE PARTIAL PLAN VIEW SHOWN ABOVE DEPICTS THE PROCEDURES TO BE USED WHEN THE EXCESS SPACE ACROSS THE VEHICLE WIDTH IS 6" OR GREATER. A LOAD OF 8", 6/PALLET, SLP IS SHOWN IN A TRUCK, CARGO, 5 TON, M54 AS A TYPICAL LOAD. KEY NUMBERS (1) THROUGH (4) SHOWN IN THE LOAD ON PAGE 46 AND FOUR (4) "SPACER ASSEMBLY B" DETAILS, AS SHOWN ABOVE, ARE REQUIRED. SEE THE "SPACER ASSEMBLY B" DETAIL ON PAGE 56.

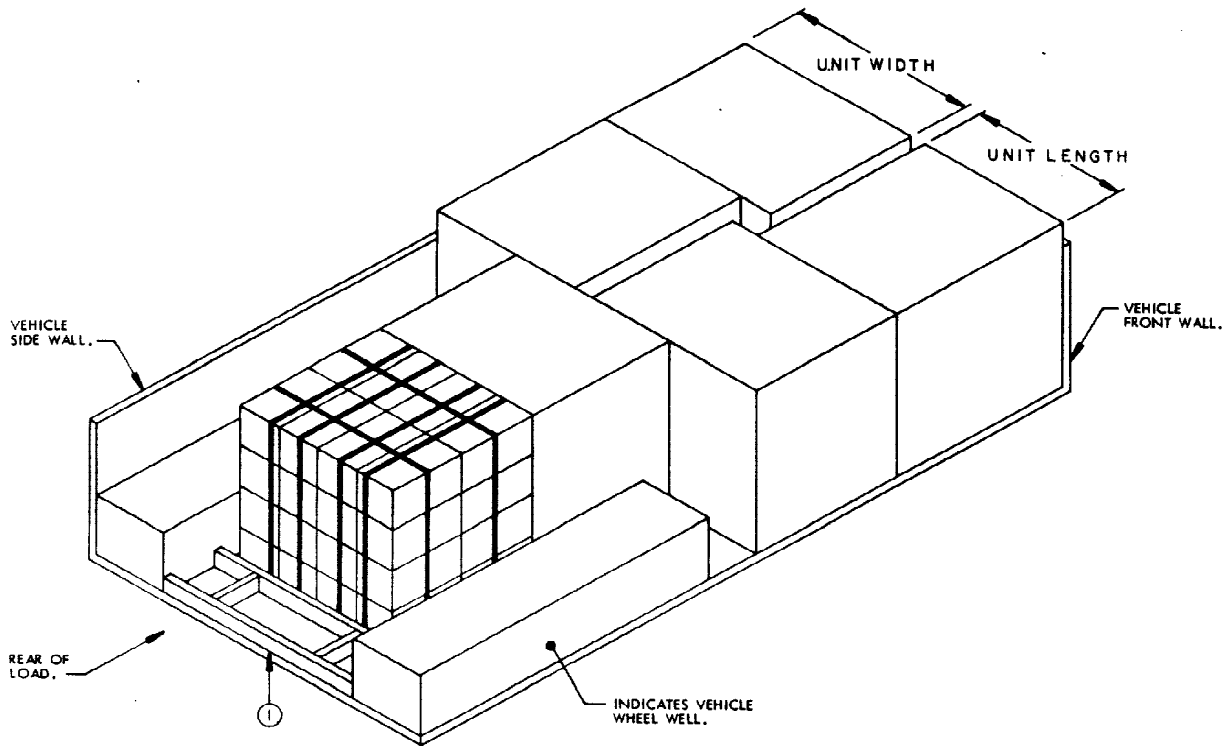
SPECIAL NOTES:

1. A TYPICAL LOAD OF PALLETIZED SEPARATE LOADING PROJECTILES IS SHOWN LOADED IN A TRUCK, CARGO, 5 TON, M54, HAVING INSIDE DIMENSIONS OF 14'-0" LONG BY 7'-4" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE 8", 3/PALLET, SEPARATE LOADING PROJECTILE SHOWN IN THE LOAD ON PAGE 46 HAS OVERALL DIMENSIONS OF 9-1/2" LONG BY 28-1/2" WIDE BY 38-1/2" HIGH AND A WEIGHT OF 633 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS. IF SHIPPING THE 8", 6/PALLET, SEE THE "PARTIAL PLAN VIEW" ON THIS PAGE. IF SHIPPING THE 155MM, 8/PALLET, SEE THE "PARTIAL PLAN VIEW" ON PAGE 45. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OK TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF NINE (9) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 46. A LOAD CAN BE REDUCED BY ONE (1) OR MORE PALLET UNITS BY USING A "FILLER ASSEMBLY" AS SHOWN ON PAGE 52. IN LIEU OF EACH OMITTED PALLET.
4. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3" NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12" USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12" USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 46.
5. PALLET UNITS POSITIONED WITH THE WIDTH ACROSS THE VEHICLE SHOULD NOT BE POSITIONED IN THE FIRST ROW OR THE LAST ROW.
6. SEE THE "TYPICAL LADING ITEMS" ON PAGE 5 FOR A DETAIL VIEW OF THE 8", 6/PALLET, SLP, SHOWN IN THE "PARTIAL PLAN VIEW" ON THIS PAGE.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	32	22
2" X 6"	38	38
NAILS	NO. REQD	POUNDS
10d (3")	50	1
STEEL STRAPPING, 1-1/4" X .035" -----	77' REQD -----	11 LBS
SEAL FOR 1-1/4" STRAPPING -----	6 REQD -----	NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
8", SLP -----	30 -----	18,990 LBS
DUNNAGE -----	-----	132 LBS
TOTAL WEIGHT -----	-----	19,122 LBS

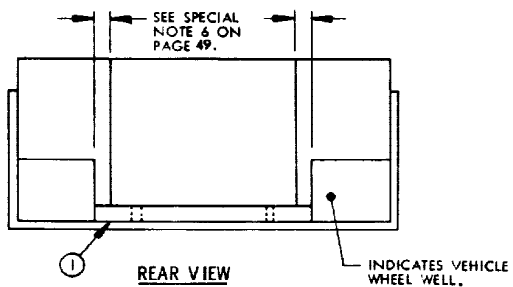


ISOMETRIC VIEW

A PALLETIZED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO PALLETIZED OR SKIDDED UNITS.

KEY NUMBER

- ① REAR BLOCKING ASSEMBLY (1 REQD). SEE THE "REAR BLOCKING ASSEMBLY D" ON PAGE 58. SEE SPECIAL NOTE 4 ON PAGE 49.



SPECIAL NOTES:

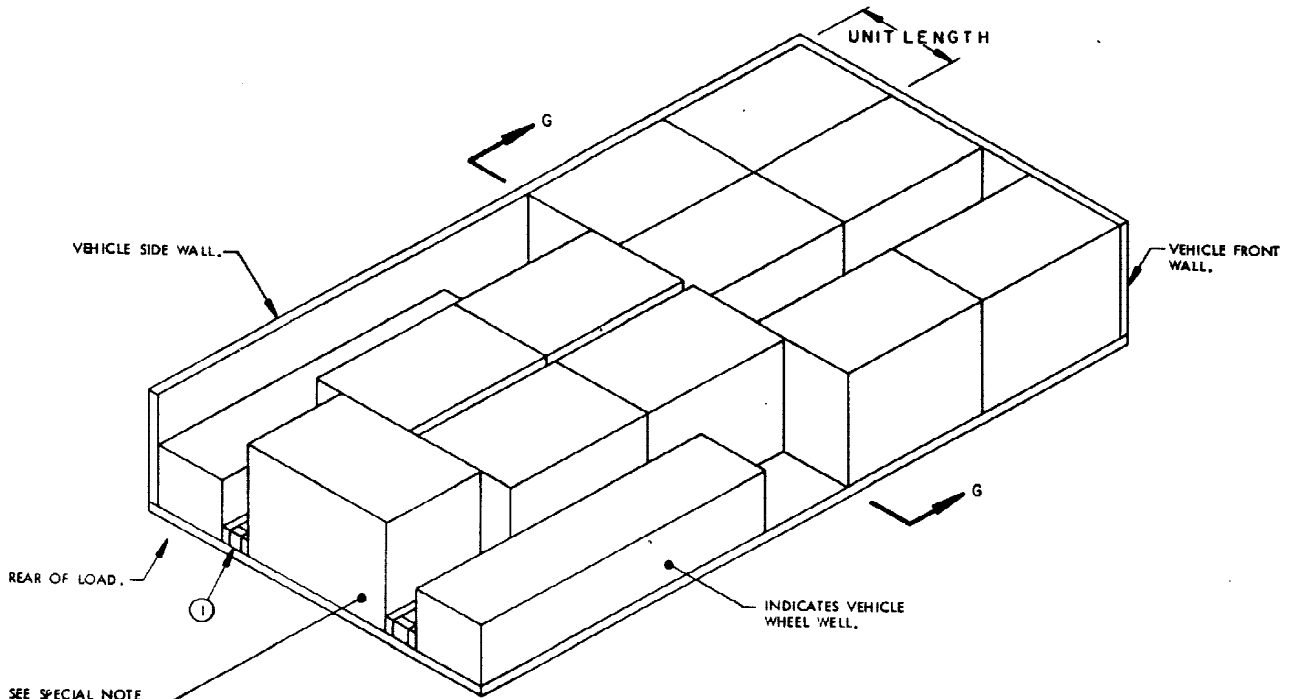
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A 40" X 48" PALLET IS SHOWN LOADED IN A TRUCK, CARGO, 8 TON, M520, HAVING INSIDE DIMENSIONS OF 16'-4" LONG BY 8'-2-1/2" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE PALLETIZED UNIT SHOWN IN THE TYPICAL 2-WIDE LOAD ON PAGE 48 HAS OVERALL DIMENSIONS OF 42-1/2" LONG BY 51" WIDE BY 45-1/2" HIGH AND A WEIGHT OF 2,180 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR PALLETIZED UNITS OF OTHER DIMENSIONS AND SKIDDED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED.
4. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3" NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12" USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12" USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 48.
5. A CHIMNEY-PATTERN LOAD IS SHOWN ON PAGE 48. FOR AN ALTERNATIVE METHOD SEE THE LOAD ON PAGE 50.
6. IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE WIDTH IS GREATER THAN 6" POSITION "SOLID FILL" (FABRICATED FROM 2" X 4" MATERIAL, ON EDGE AND LAMINATED W/10d NAILS) BETWEEN THE UNIT AND THE VEHICLE WHEEL WELL.
7. SEE THE "TYPICAL LADING ITEMS" ON PAGE 4 FOR A DETAIL VIEW OF THE PALLETIZED UNIT, SHOWN IN THE LOAD ON PAGE 48.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	13	9
NAILS	NO. REQD	POUNDS
10d (3")	8	1/4

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNIT	6	13,080 LBS
DUNNAGE		19 LBS
TOTAL WEIGHT		13,099 LBS



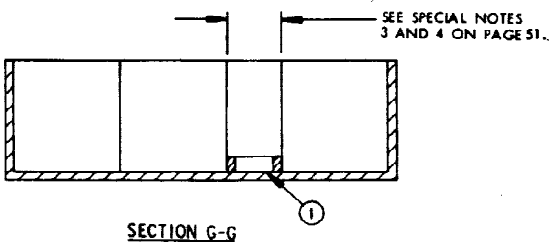
SEE SPECIAL NOTE 6 ON PAGE 51.

ISOMETRIC VIEW

A SKIDDED UNIT IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO SKIDDED OR PALLETIZED UNITS.

KEY NUMBER

- ① SPACER ASSEMBLY (3 REQD). SEE THE "SPACER ASSEMBLY A" DETAIL ON PAGE 54. SEE SPECIAL NOTE 4 ON PAGE 51.



SECTION G-G

SPECIAL NOTES:

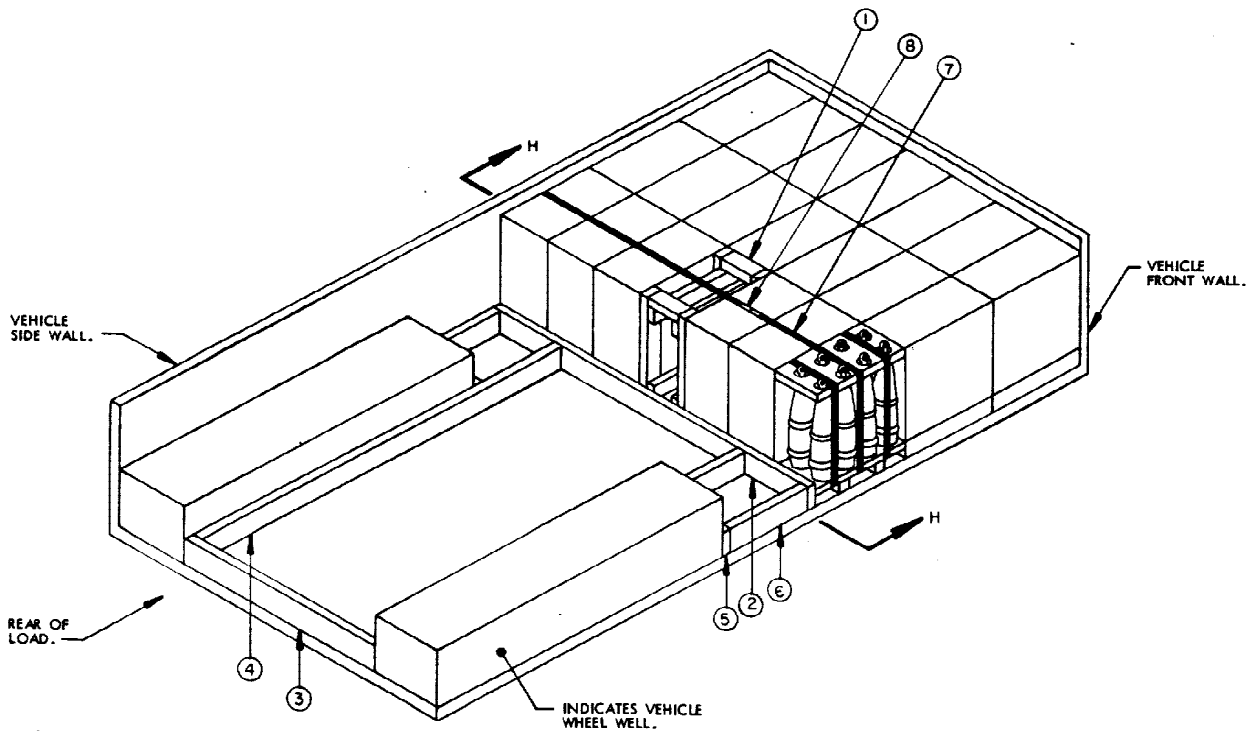
1. A TYPICAL LOAD OF BOXED AMMUNITION ASSEMBLED ON A SKIDDED BASE IS SHOWN LOADED IN A TRUCK, CARGO, 8 TON, M520, HAVING INSIDE DIMENSIONS OF 16'-4" LONG BY 8'-2-1/2" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE SKIDDED UNIT SHOWN IN THE TYPICAL 3-WIDE LOAD ON PAGE 50 HAS OVERALL DIMENSIONS OF 28-1/4" LONG BY 41-5/8" WIDE BY 31" HIGH AND A WEIGHT OF 253 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR SKIDDED UNITS OF OTHER DIMENSIONS, AND PALLETIZED UNITS. REFER TO "CHART NO. 1" AND "CHART NO. 2" ON PAGE 3 FOR GUIDANCE. SEE GENERAL NOTE "F" ON PAGE 2.
3. TOP-OF-LOAD ANTI-SWAY BRACES, SHOWN AS PIECES MARKED ② IN THE LOAD ON PAGE 42, ARE TO BE POSITIONED BETWEEN ALL Laterally ADJACENT UNITS WHICH ARE OVER 44" HIGH. NOTE: TOP-OF-LOAD ANTI-SWAY BRACES ARE NOT REQUIRED IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE IS 6" OR LESS.
4. SPACER ASSEMBLIES, SHOWN AS PIECES MARKED ① IN THE LOAD ON PAGE 30, MUST BE POSITIONED AT THE SIDES OF THE SINGLE UNIT AT THE REAR OF THE LOAD AND BETWEEN Laterally ADJACENT UNITS AT THE FORWARD END OF THE LOAD. NOTE: SPACER ASSEMBLIES ARE NOT REQUIRED BETWEEN Laterally ADJACENT UNITS AT THE FORWARD END OF THE LOAD OR AT SIDES OF THE REAR UNIT, IF THE TOTAL EXCESS SPACE ACROSS THE VEHICLE IS 6" OR LESS.
5. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED.
6. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3", NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12", USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12", USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 48.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	31	21
NAILS	NO. REQD	POUNDS
10d (3")	48	3/4

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
SKIDDED UNIT -----	11 -----	2,783 LBS
DUNNAGE -----		43 LBS
TOTAL WEIGHT -----		2,826 LBS

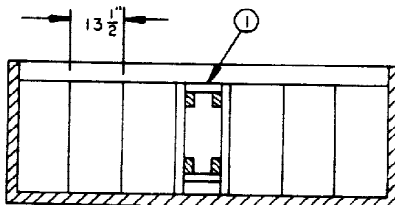


ISOMETRIC VIEW

THE 155MM, 8/PALLET, SLP IS DEPICTED. HOWEVER, THE LOAD PROCEDURES ARE APPLICABLE TO UNITS OF OTHER DIMENSIONS.

KEY NUMBERS

- ① FILLER ASSEMBLY (1 REQ'D). SEE THE DETAIL ON PAGE 56. SEE SPECIAL NOTE 3 ON PAGE 53.
- ② FRONT BEARING PIECE, 2" X 6" BY VEHICLE WIDTH MINUS 1/2" (1 REQ'D). POSITION ON EDGE AS SHOWN.
- ③ REAR BEARING PIECE, 2" X 6" BY LENGTH-TO-SUIT (1 REQ'D). POSITION ON EDGE AS SHOWN.
- ④ STRUT, 2" X 6" BY CUT-TO-FIT (2 REQ'D). POSITION ON EDGE AND TOENAIL TO PIECES MARKED ② AND ③ W/2-12d NAILS AT EACH END. NAIL TO PIECE MARKED ⑤ W/2-10d NAILS AT EACH JOINT.
- ⑤ BUFFER PIECE, 2" X 6" BY CUT-TO-FIT (2 REQ'D). POSITION ON EDGE AGAINST WHEEL WELL AS SHOWN.
- ⑥ STRUT, 2" X 6" BY CUT-TO-FIT (2 REQ'D). POSITION ON EDGE AND TOENAIL TO PIECES MARKED ② AND ⑤ W/2-12d NAILS AT EACH END.
- ⑦ UNITIZING STRAP, 1-1/4" X .035" X 24'-0" LONG STEEL STRAPPING (1 REQ'D). INSTALL TO ENCIRCLE SIX UNITS AND PIECE MARKED ① AS SHOWN.
- ⑧ SEAL FOR 1-1/4" STRAPPING (2 REQ'D). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



SECTION H-H

SPECIAL NOTES:

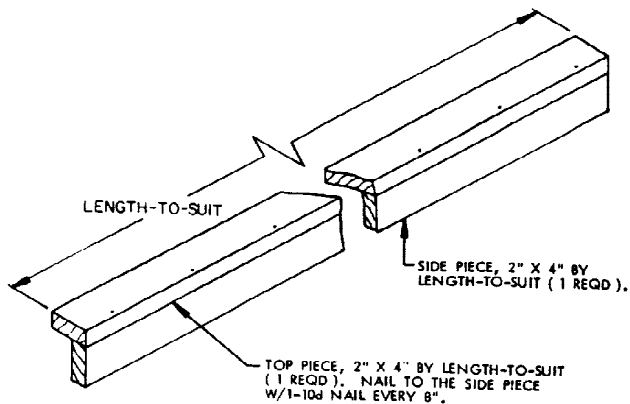
1. A TYPICAL LOAD OF PALLETIZED SEPARATE LOADING PROJECTILES IS SHOWN LOADED IN A TRUCK, CARGO, 8 TON, M520, HAVING INSIDE DIMENSIONS OF 16'-4" LONG BY 8'-2-1/2" WIDE. TRUCKS OF OTHER DIMENSIONS CAN BE USED.
2. THE 155MM, 8/PALLET, SEPARATE LOADING PROJECTILE SHOWN IN THE LOAD ON PAGE 52, HAS OVERALL DIMENSIONS OF 13-1/2" LONG BY 27" WIDE BY 31-1/2" HIGH AND A WEIGHT OF 800 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF SEVEN (7) UNITS AND USING THE SAME PROCEDURES SHOWN ON PAGE 52. A LOAD CAN BE REDUCED BY ONE (1) OR MORE PALLET UNITS BY USING A "FILLER ASSEMBLY" AS SHOWN ON PAGE 52 IN LIEU OF EACH OMITTED PALLET.
4. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3" NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3" BUT LESS THAN 12" USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 52. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12" USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 52.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	23	16
2" X 6"	40	40
NAILS	NO. REQD	POUNDS
10d (3")	44	3/4
12d (3-1/2")	16	1/2
STEEL STRAPPING, 1-1/4" X .035" ----- 24' REQD -----		4 LBS
SEAL FOR 1-1/4" STRAPPING ----- 2 REQD -----		NIL

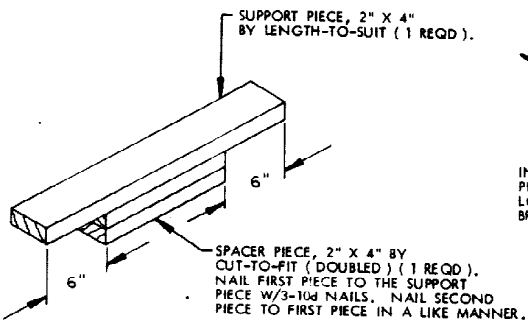
LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
155MM, SLP -----	20 -----	16,000 LBS
DUNNAGE -----		118 LBS
TOTAL WEIGHT -----		16,118 LBS



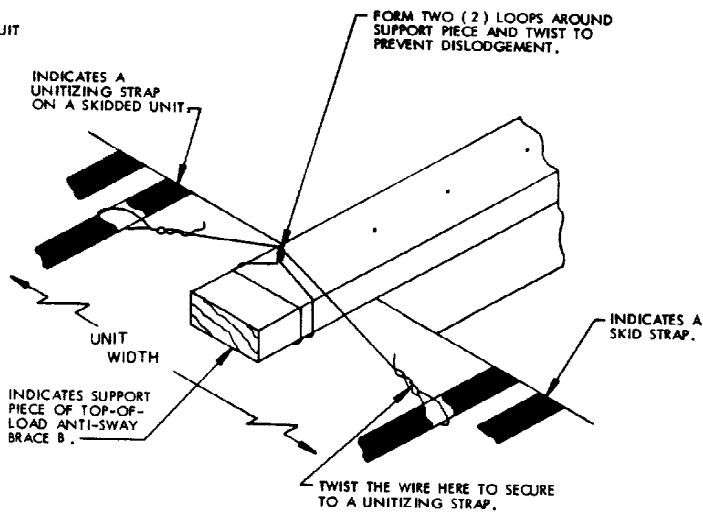
ANTI-SWAY ASSEMBLY A

THIS ASSEMBLY IS FOR USE IN LOADS OF PALLETIZED AND SKIDDED UNITS, OR LOADS OF SEPARATE LOADING PROJECTILES. SEE THE LOAD ON PAGE 6 AND PAGE 20 FOR GUIDANCE.



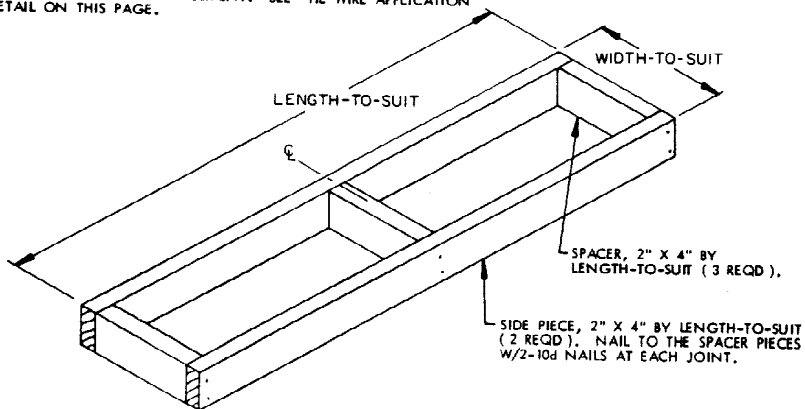
TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLY B

THIS ASSEMBLY IS DESIGNED FOR USE BETWEEN THE TOPS OF LATERALLY ADJACENT PALLETIZED OR SKIDDED UNITS, WHICH ARE OVER 44" HIGH, TO PREVENT THE UNITS FROM TIPPING INTO THE VOID AREA. THIS ASSEMBLY WILL BE WIRE TIED TO UNIT STRAPS TO PREVENT DISPLACEMENT. SEE "TIE WIRE APPLICATION" DETAIL ON THIS PAGE.



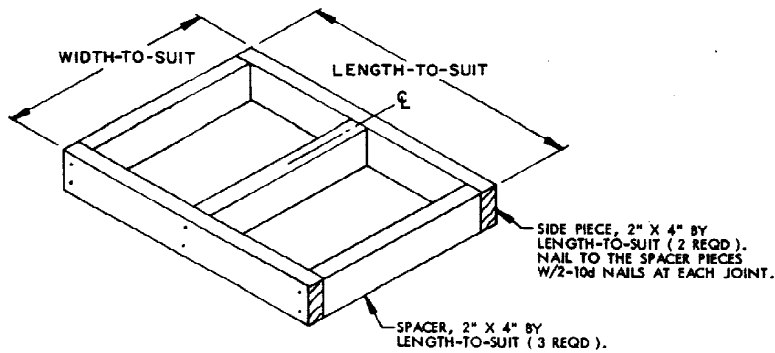
TIE WIRE APPLICATION

THIS VIEW DEPICTS THE SECUREMENT OF A TOP-OF-LOAD ANTI-SWAY BRACE B TO THE TOP OF A SKIDDED UNIT BY WIRE TYPING TO THE UNITIZING STRAPS WITH NO. 14 GAGE WIRE. THIS PROCEDURE IS APPLICABLE FOR SKIDDED AND PALLETIZED UNITS.



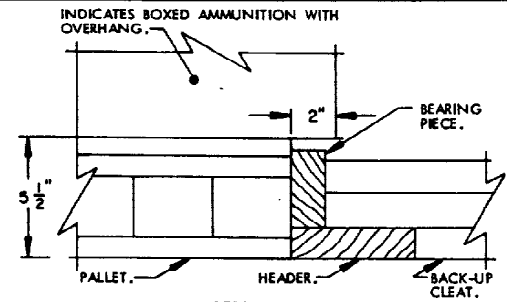
SPACER ASSEMBLY A

THIS ASSEMBLY IS FOR USE IN LOADS OF PALLETIZED OR SKIDDED UNITS. SEE THE LOAD ON PAGE 30 FOR GUIDANCE.



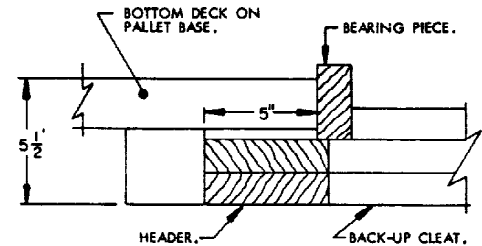
REAR BLOCKING ASSEMBLY A

THIS ASSEMBLY IS FOR USE IN A LOAD OF PALLETIZED OR SKIDDED UNITS. SEE THE LOAD ON PAGE 32 FOR GUIDANCE.



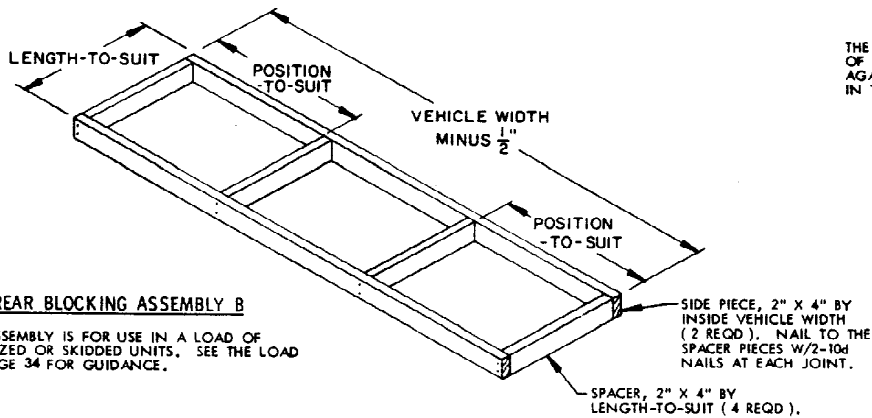
DETAIL A

THE PARTIAL VIEW ABOVE DEPICTS THE POSITIONING OF THE HEADER, BACK-UP CLEAT, AND BEARING PIECE AGAINST THE END OF A 40" X 48" OR 35" X 48-1/2" PALLET OR SKIDDED BASE AS SHOWN IN THE LOAD ON PAGE 6.



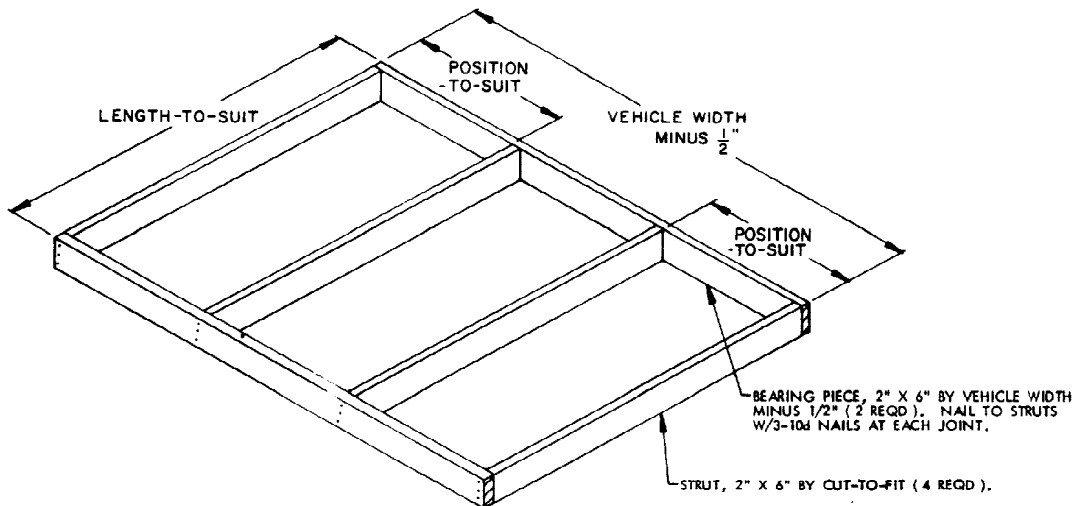
DETAIL B

THE PARTIAL VIEW ABOVE DEPICTS THE POSITIONING OF THE HEADER, BACK-UP CLEAT, AND BEARING PIECE AGAINST THE SLP PALLET BASE ASSEMBLY AS SHOWN IN THE LOAD ON PAGE 10.



REAR BLOCKING ASSEMBLY B

THIS ASSEMBLY IS FOR USE IN A LOAD OF PALLETIZED OR SKIDDED UNITS. SEE THE LOAD ON PAGE 34 FOR GUIDANCE.



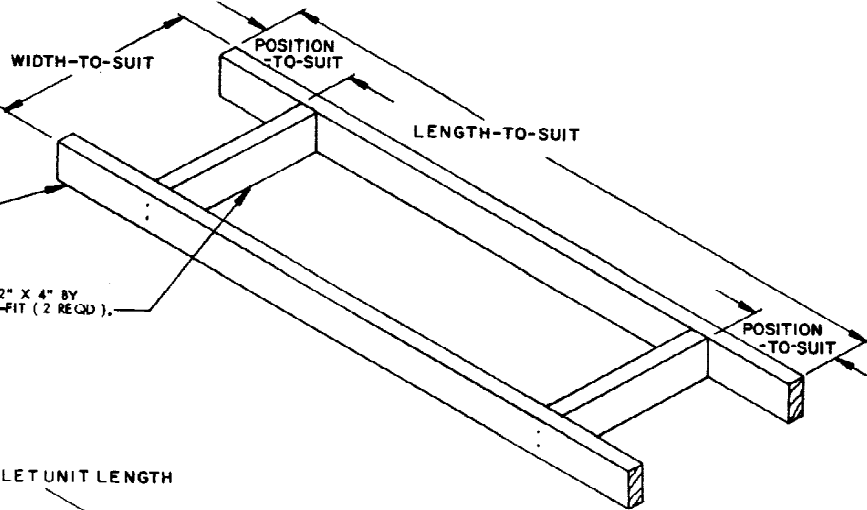
REAR BLOCKING ASSEMBLY C

THIS ASSEMBLY IS FOR USE IN A LOAD OF SEPARATE LOADING PROJECTILES. SEE THE LOAD ON PAGE 44 FOR GUIDANCE.

DETAILS

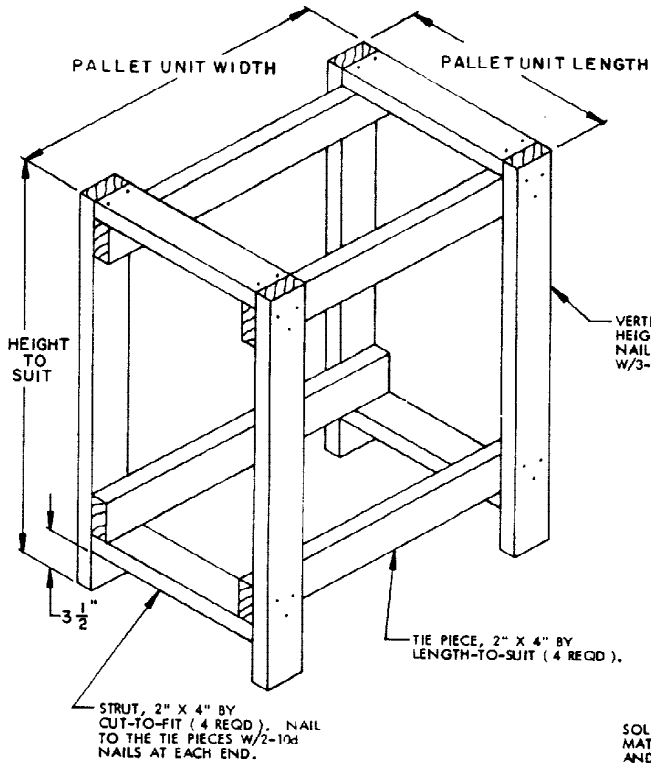
BEARING PIECE, 2" X 4" BY LENGTH-TO-SUIT (2 REQD). NAIL TO THE STRUTS W/2-10d NAILS AT EACH JOINT.

STRUT, 2" X 4" BY CUT-TO-FIT (2 REQD).



REAR BLOCKING ASSEMBLY D

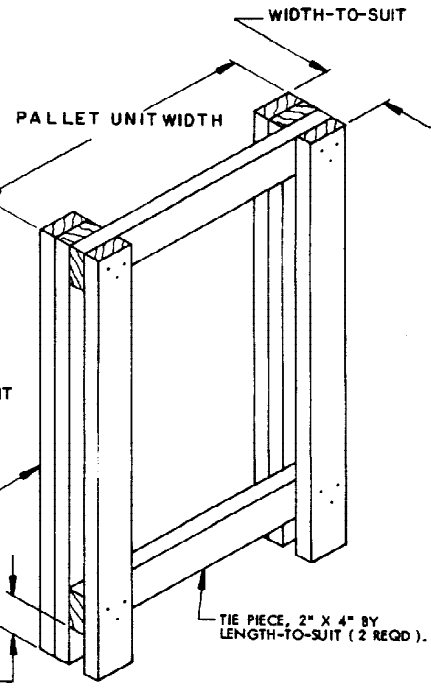
THIS ASSEMBLY IS FOR USE IN A LOAD OF PALLETIZED OR SKIDDED UNITS WHEN THE REAR UNIT IS CENTERED ACROSS THE VEHICLE WIDTH. SEE THE LOAD ON PAGE 48 FOR GUIDANCE.



FILLER ASSEMBLY

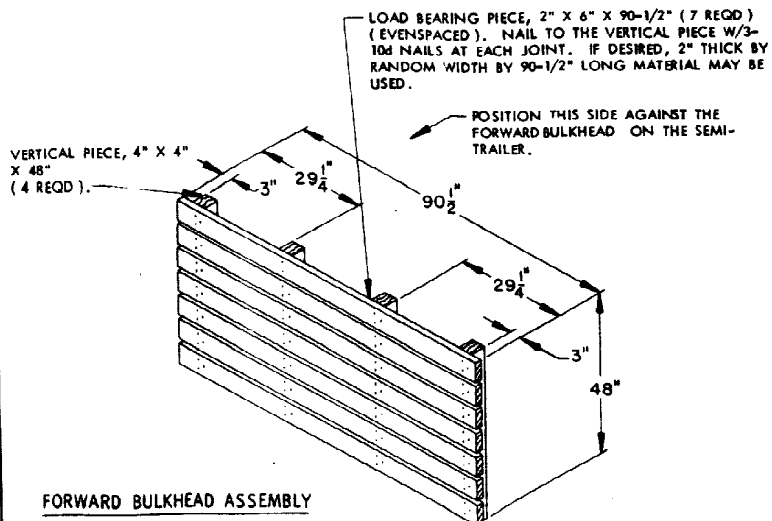
THIS ASSEMBLY IS FOR USE IN A LOAD OF SEPARATE LOADING PROJECTILES. ONE FILLER ASSEMBLY IS REQUIRED FOR EACH PALLET OF SEPARATE LOADING PROJECTILES THAT IS OMITTED FROM A LOAD. SEE THE LOAD ON PAGE 52 FOR GUIDANCE.

VERTICAL PIECE, 2" X 4" BY HEIGHT-TO-SUIT (4 REQD). NAIL TO THE TIE PIECES W/3-10d NAILS AT EACH JOINT.



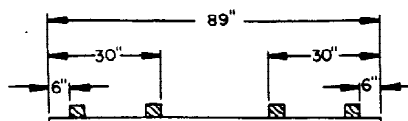
SPACER ASSEMBLY B

THIS ASSEMBLY IS FOR USE IN A LOAD OF SEPARATE LOADING PROJECTILES TO FILL THE EXCESS SPACE ACROSS THE VEHICLE WIDTH. SEE THE PARTIAL PLAN VIEWS ON PAGES 45 AND 47 FOR GUIDANCE.



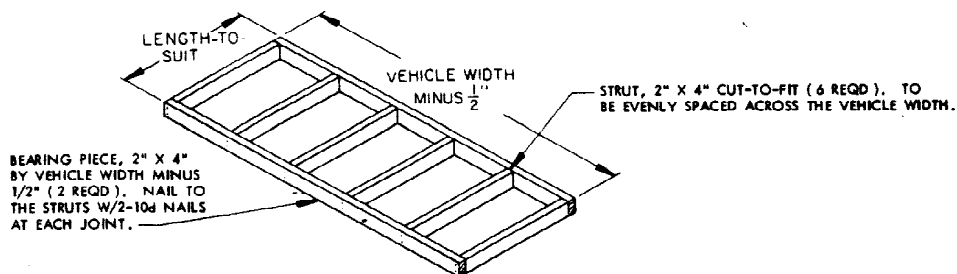
FORWARD BULKHEAD ASSEMBLY

THE "FORWARD BULKHEAD ASSEMBLY" SHOWN ABOVE IS FOR USE IN AN M872 SEMITRAILER. IF A M871 SEMITRAILER IS BEING USED SEE "DETAIL C" AT THE RIGHT FOR MODIFICATION. THIS ASSEMBLY IS REQUIRED AS THE FORWARD BULKHEAD ON THE M872 SEMITRAILER HAS "GUSSETS" AND THE FORWARD BULKHEAD ON THE M871 SEMITRAILER HAS "EYE-BOLTS", WHICH PROTRUDE INTO THE LADING AREA.



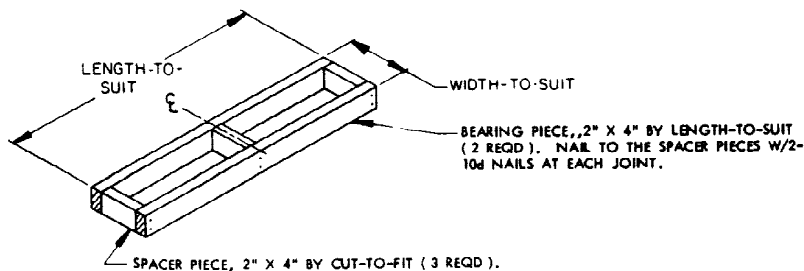
DETAIL C

WHEN CONSTRUCTING A "FORWARD BULKHEAD ASSEMBLY" FOR USE IN AN M871 SEMITRAILER POSITION THE 4" X 4" X 48" VERTICAL PIECES AS SHOWN ABOVE. THE SEVEN (7) 2" X 6" "LOAD BEARING PIECES" WILL BE 89" LONG. IF DESIRED, 2" THICK BY RANDOM WIDTH BY 89" LONG MATERIAL MAY BE USED.



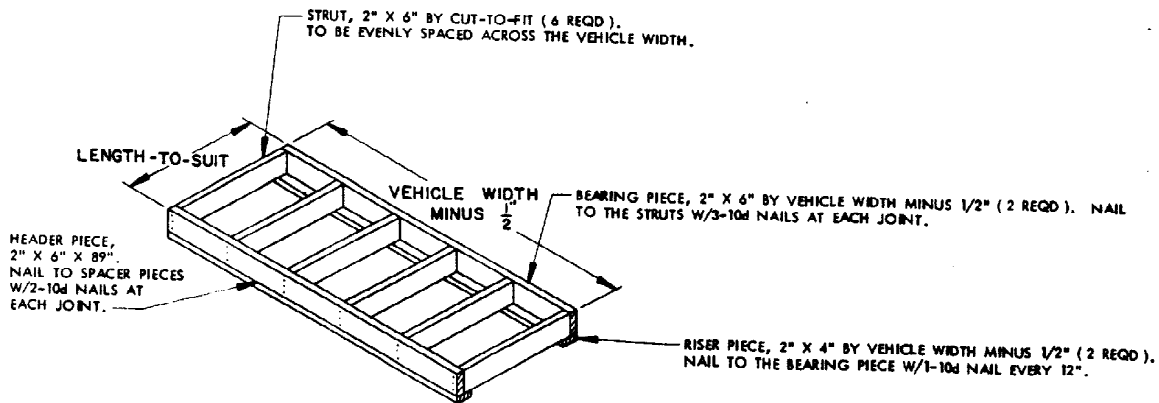
RETAINER ASSEMBLY A

THIS ASSEMBLY IS FOR USE IN A LOAD OF PALLETIZED OR SKIDDED UNITS IN/ON AN M871 OR M872 SEMITRAILER. SEE THE LOAD ON PAGE 14 FOR GUIDANCE.



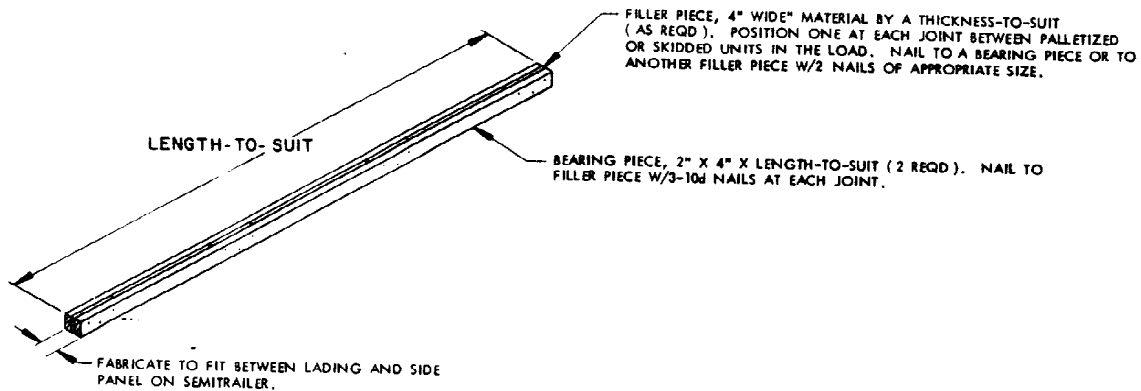
SIDE BLOCKING ASSEMBLY A

THIS ASSEMBLY IS FOR USE IN A LOAD OF PALLETIZED OR SKIDDED UNITS IN/ON AN M871 OR M872 SEMITRAILER. SEE THE LOAD ON PAGE 12 AND THE "ALTERNATIVE SIDE BLOCKING" ON PAGE 13 FOR GUIDANCE.



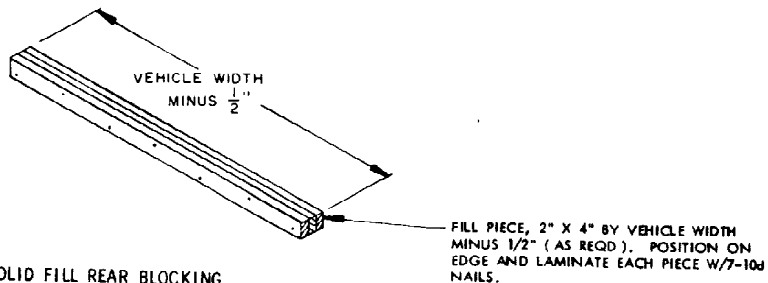
RETAINER ASSEMBLY B

THIS ASSEMBLY IS FOR USE IN A LOAD OF SEPARATE LOADING PROJECTILES IN/ON AN M871 OR M872 SEMITRAILER. IT MAY BE USED FOR FORWARD BLOCKING, CENTER BLOCKING, OR REAR BLOCKING. SEE THE LOAD ON PAGE 26 FOR GUIDANCE.



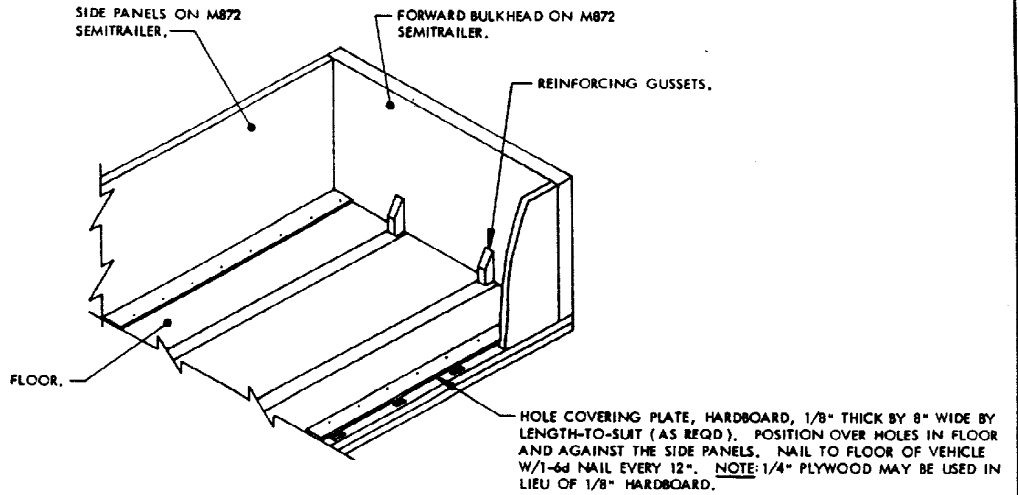
SIDE BLOCKING ASSEMBLY B

THIS ASSEMBLY IS FOR USE IN A LOAD OF PALLETIZED UNITS, SKIDDED UNITS, OR SEPARATE LOADING PROJECTILES IN/ON AN M871 OR M872 SEMITRAILER. THE BEARING PIECES MAY BE RANDOM LENGTH PIECES OF 2" X 4" MATERIAL. SEE THE LOAD ON PAGES 16 AND 26 FOR GUIDANCE.



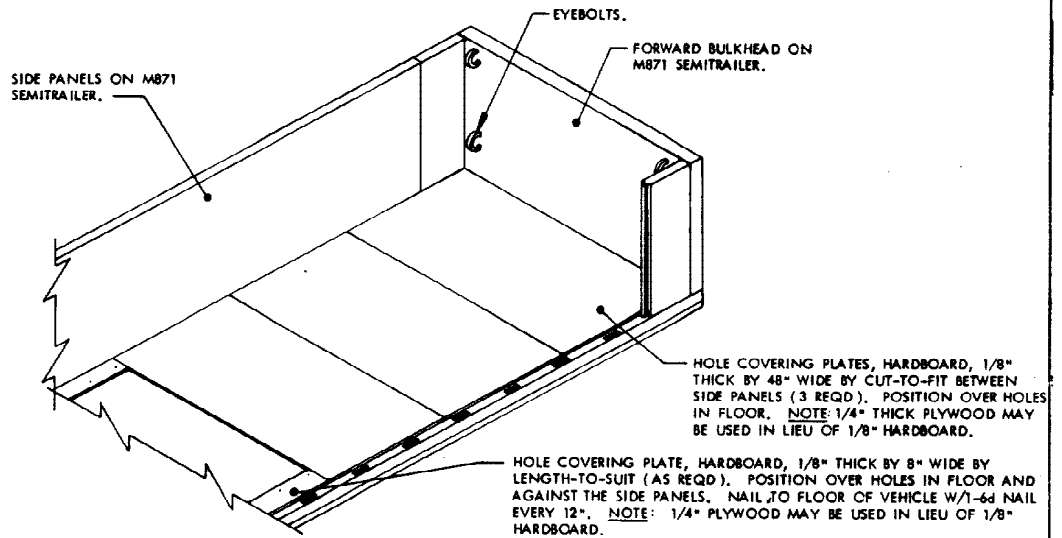
SOLID FILL REAR BLOCKING

THIS ASSEMBLY IS FOR USE IN A LOAD OF PALLETIZED OR SKIDDED UNITS. IT MAY BE USED AS AN ALTERNATIVE FOR REAR BLOCKING WHEN THE SPACE AT THE REAR OF A LOAD IS LESS THAN 12".



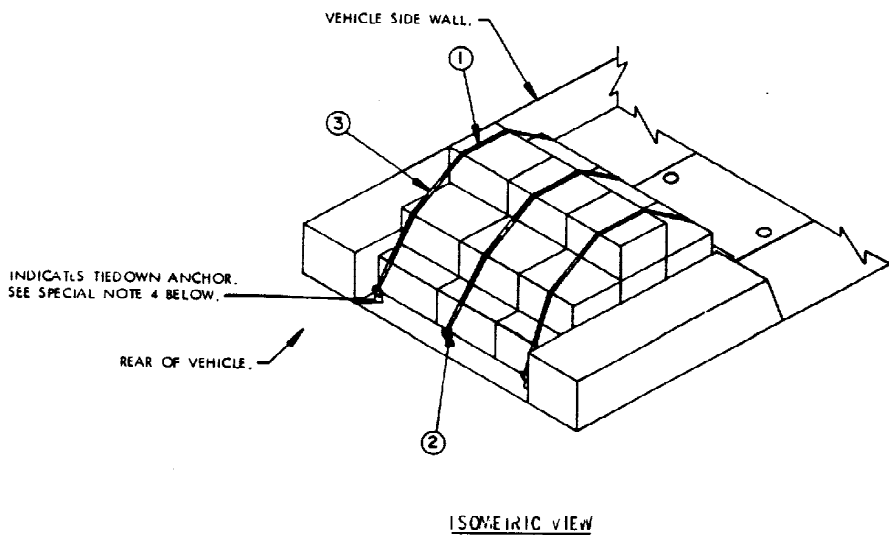
ALTERNATIVE HOLE COVERING FOR M872 SEMITRAILER

IF HOLE COVERING PLATES ARE NOT PROVIDED WITH THE VEHICLE, ALTERNATIVE HOLE COVERING PLATES MADE FROM 1/8" THICK HARDBOARD OR 1/4" THICK PLYWOOD MAY BE USED. THESE PLATES MUST BE POSITIONED SO THEY WILL BE AGAINST THE SIDE PANELS AND NOT UNDER THE SIDE PANELS. LADING MAY BE POSITIONED ON TOP OF THE HOLE COVERING PLATES. THE METHOD SHOWN ABOVE IS FOR THE M872 SEMITRAILER. SEE GENERAL NOTE "M" ON PAGE 2.



ALTERNATIVE HOLE COVERING FOR M871 SEMITRAILER

IF HOLE COVERING PLATES ARE NOT PROVIDED WITH THE VEHICLE, ALTERNATIVE HOLE COVERING PLATES MADE FROM 1/8" THICK HARDBOARD OR 1/4" THICK PLYWOOD MAY BE USED. THE HOLE COVERING PLATES AT THE FORWARD END OF THE M871 SEMITRAILER MUST BE CUT-TO-FIT BETWEEN SIDE PANELS, AS SHOWN ABOVE, BECAUSE THE FIRST 10'-0" PORTION OF THE TRAILER FLOOR IS ALL STEEL. ALTERNATIVE HOLE COVERING PLATES FOR THE REAR PORTION MAY BE THE SAME AS USED IN THE M872 SEMITRAILER. THESE PLATES MUST BE POSITIONED SO THEY WILL BE AGAINST THE SIDE PANEL AND NOT UNDER THE SIDE PANELS. LADING MAY BE POSITIONED ON TOP OF THE HOLE COVERING PLATES. THE METHOD SHOWN ABOVE IS FOR THE M871 SEMITRAILER. SEE GENERAL NOTE "M" ON PAGE 2.



SPECIAL NOTES:

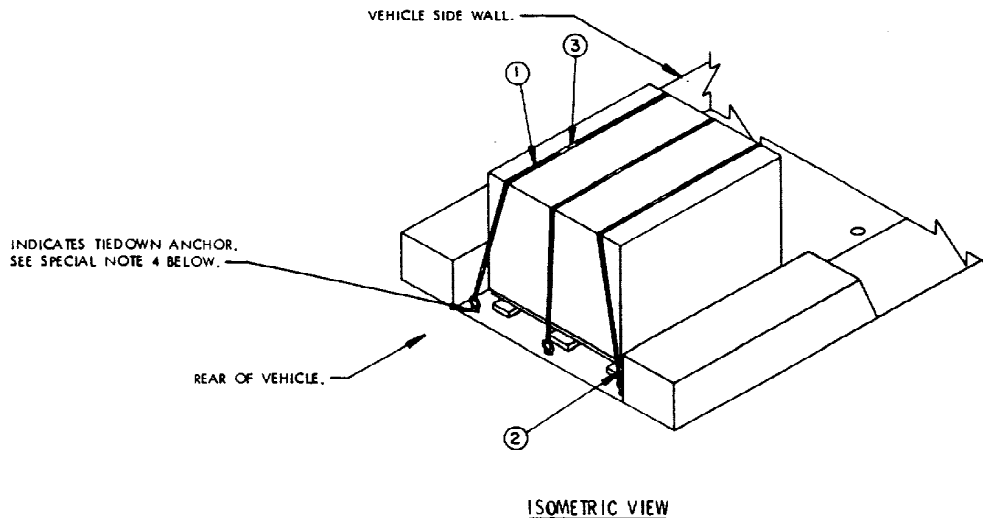
1. A TYPICAL LOAD OF TWENTY FOUR LOOSE BOXES OF AMMUNITION IS SHOWN IN A TRUCK, CARGO, 1-1/4-TON, M998 (HMMWV), HAVING USEABLE INSIDE DIMENSIONS OF 51" LONG BY 52" WIDE.
2. THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY, AND VEHICLES OF OTHER DIMENSIONS, AND/OR TRAILERS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN ANCHORS, LOCATED IN THE SIDEWALL, END WALL, OR FLOOR, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
3. THE LOAD SHOWN ON THIS PAGE DEPICTS A TYPICAL LOAD OF BOXED AMMUNITION CONSISTING OF TWENTY-FOUR BOXES OF CARTRIDGE, 5.56MM, HAVING DIMENSIONS OF 17" LONG BY 13-3/8" WIDE BY 9-9/16" HIGH. IF LOADING BOXES OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
4. LOOSE BOXED AMMUNITION MAY BE TRANSPORTED IN THE M998 HMMWV AND SECURED USING THE ORIGINAL EQUIPMENT TIEDOWN ANCHORS, PROVIDED THE ANGLE OF THE INSTALLED HOLD DOWN STRAP IS 45 DEGREES OR LESS FROM THE HORIZONTAL CARGO BED. IF THE ANGLE EXCEEDS 45 DEGREES, AS DEPICTED ABOVE, THE TIEDOWN ANCHORS MUST BE REPLACED WITH 1/2" SHOULDER EYEBOLTS. SHOULDER EYEBOLTS USED MUST CONFORM TO MATERIAL SPECIFICATION MS 51937; SIZE 1/2", 13 UNC 2A, NSN 5306-00-050 0347. A 75 FT-LB MINIMUM TORQUE REQUIREMENT FOR TIEDOWN FIXTURES IS TO BE OBSERVED WHEN INSTALLING EYEBOLTS AND EYEBOLTS ARE TO BE ORIENTATED AS SHOWN IN THE ISOMETRIC VIEW ABOVE.
5. WHEN TRANSPORTING A LOAD OF MORE THAN THREE BOXES WIDE, A SHORT PIECE OF DUNNAGE MATERIAL, SUCH AS A 2" X 4", MUST BE POSITIONED ON TOP OF THE LOAD SO AS TO CONTACT ALL TOP LAYER BOXES THAT ARE NOT RESTRAINED BY A HOLD DOWN STRAP. THIS PIECE OF DUNNAGE MATERIAL SHALL BE OF SUCH A LENGTH TO INSURE CONTACT WITH EACH BOX IN THE TOP LAYER THAT IS NOT RESTRAINED BY AN INDIVIDUAL HOLD DOWN STRAP.

KEY NUMBERS

- ① HOLD DOWN STRAP, 3/4" X .035" OR .031" X 10' - 0" LONG STEEL STRAPPING (3 REQD). INSTALL FROM TWO (2) PIECES.
- ② PAD, 3/4" X 18" LONG STEEL STRAPPING (6 REQD). POSITION THRU TIEDOWN ANCHOR AND SEAL TO HOLD DOWN STRAP, PIECE MARKED ①, W/1 SEAL.
- ③ SEAL FOR 3/4" STRAPPING (18 REQD) 6 PER STRAP). DOUBLE CRIMP EACH SEAL, EXCEPT THOSE USED TO SECURE THE PADS, PIECES MARKED ②

LOAD AS SHOWN

<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
LOOSE BOXES	24	1,848 LBS



SPECIAL NOTES:

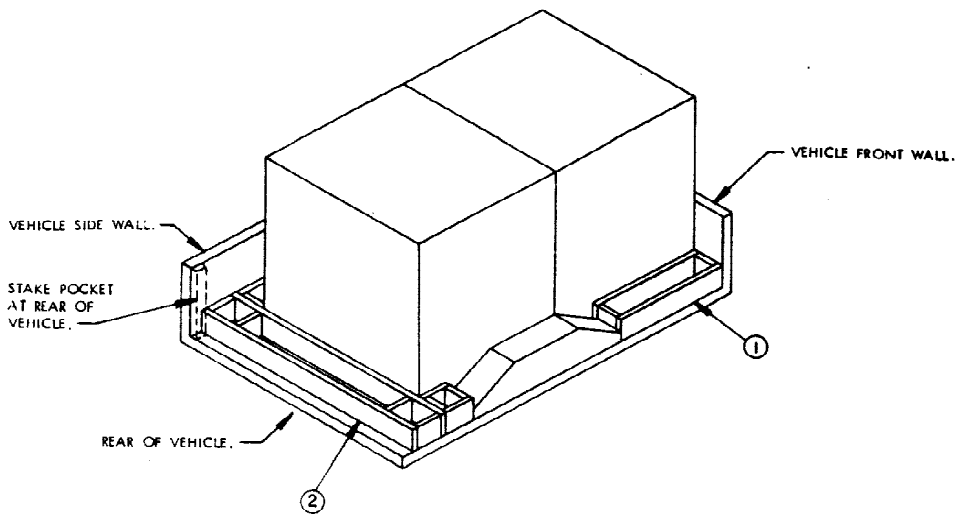
1. A MAXIMUM LOAD OF ONE PALLET OF BOXED AMMUNITION IS SHOWN IN A TRUCK, CARGO, 1-1/4-TON, M998 (HMMWV), HAVING USEABLE INSIDE DIMENSIONS OF 51" LONG BY 52" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE WEIGHT OF THE PALLETIZED UNIT SHOWN.
2. THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY, AND VEHICLES OF OTHER DIMENSIONS, AND/OR TRAILERS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN ANCHORS, LOCATED ON THE SIDEWALL, END WALL, OR FLOOR, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
3. ONE PALLETIZED UNIT OF BOXED AMMUNITION HAVING DIMENSIONS OF 50" WIDE BY 44" LONG BY 38" HIGH IS SHOWN IN THE LOAD ABOVE. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES. NOTE: PALLET UNIT DIMENSIONS PERPENDICULAR TO WHEEL WELL MUST BE 44" OR GREATER TO ALLOW FOR PROPER PLACEMENT OF THREE HOLD DOWN STRAPS.
4. PALLETIZED AMMUNITION MUST NOT BE TRANSPORTED ON THE M998 CARGO TRUCK UNLESS THE TIEDOWN ANCHORS HAVE BEEN REPLACED WITH 1/2" SHOULDER EYEBOLTS. SHOULDER EYEBOLTS USED MUST CONFORM TO MATERIAL SPECIFICATION MS 51937, SIZE 1/2", 13 UNC-2A NSN 5306-00-090-0347. A 75 FT-LB MINIMUM TORQUE REQUIREMENT FOR TIEDOWN FIXTURES IS TO BE OBSERVED WHEN INSTALLING EYEBOLTS AND EYEBOLTS ARE TO BE ORIENTED AS SHOWN IN THE ISOMETRIC VIEW ABOVE.

KEY NUMBERS

- ① HOLD DOWN STRAP, 3/4" X .035" OR .031" X 12' - 0" LONG STEEL STRAPPING (3 REQD). INSTALL FROM TWO (2) PIECES.
- ② PAD, 3/4" X 18" LONG STEEL STRAPPING (6 REQD). POSITION THRU TIEDOWN ANCHOR AND SEAL TO HOLD DOWN STRAP, PIECE MARKED ①, W/1 SEAL.
- ③ SEAL FOR 3/4" STRAPPING (18 REQD, 6 PER STRAP). DOUBLE CRIMP EACH SEAL, EXCEPT THOSE USED TO SECURE THE PADS, PIECES MARKED ②. SEE GENERAL NOTE "L" ON PAGE 2.

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNIT	1	2,300 LBS



ISOMETRIC VIEW

SPECIAL NOTES:

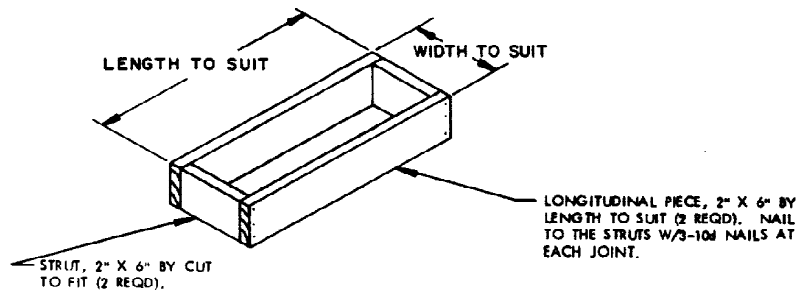
1. A MAXIMUM LOAD OF TWO SKIDDED UNITS OF BOXED AMMUNITION IS SHOWN IN A TRUCK, CARGO, 1-1/4-TON, M1008 (CUCV), HAVING INSIDE DIMENSIONS OF 98" LONG BY 65" WIDE (USEABLE WIDTH OF 48").
2. THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY, AND VEHICLES OF OTHER DIMENSIONS, AND/OR TRAILERS, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
3. TWO SKIDDED UNITS OF BOXED AMMUNITION HAVING DIMENSIONS OF 42" WIDE BY 47" LONG BY 48" HIGH, ARE SHOWN AS A TYPICAL LOAD. IF LOADING SKIDDED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
4. IF THE SPACE AT THE REAR OF THE LOAD IS LESS THAN 3", NO REAR BLOCKING IS REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 3", BUT LESS THAN 12", USE SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 32. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 12", USE THE REAR BLOCKING AS SHOWN IN THE ISOMETRIC VIEW ABOVE.

KEY NUMBERS

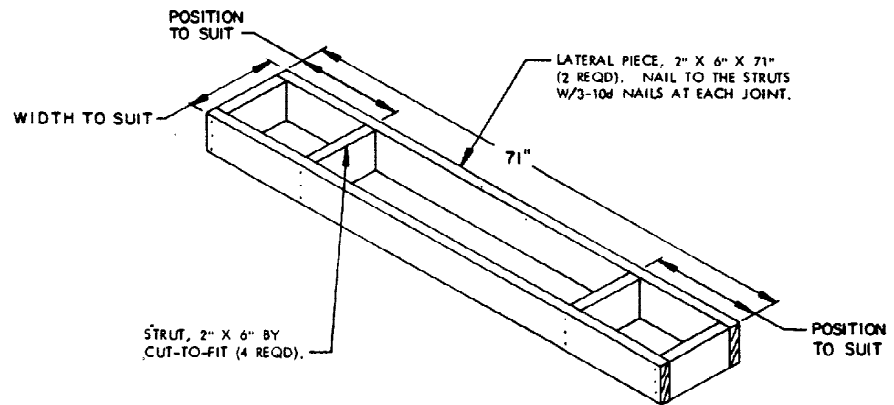
- ① SIDE BLOCKING (4 REQD). SEE THE "SIDE BLOCKING ASSEMBLY C" DETAIL ON PAGE 63.
- ② REAR BLOCKING (1 REQD). SEE THE "REAR BLOCKING ASSEMBLY E" DETAIL ON PAGE 63. SEE SPECIAL NOTE 4 AT LEFT.

LOAD AS SHOWN

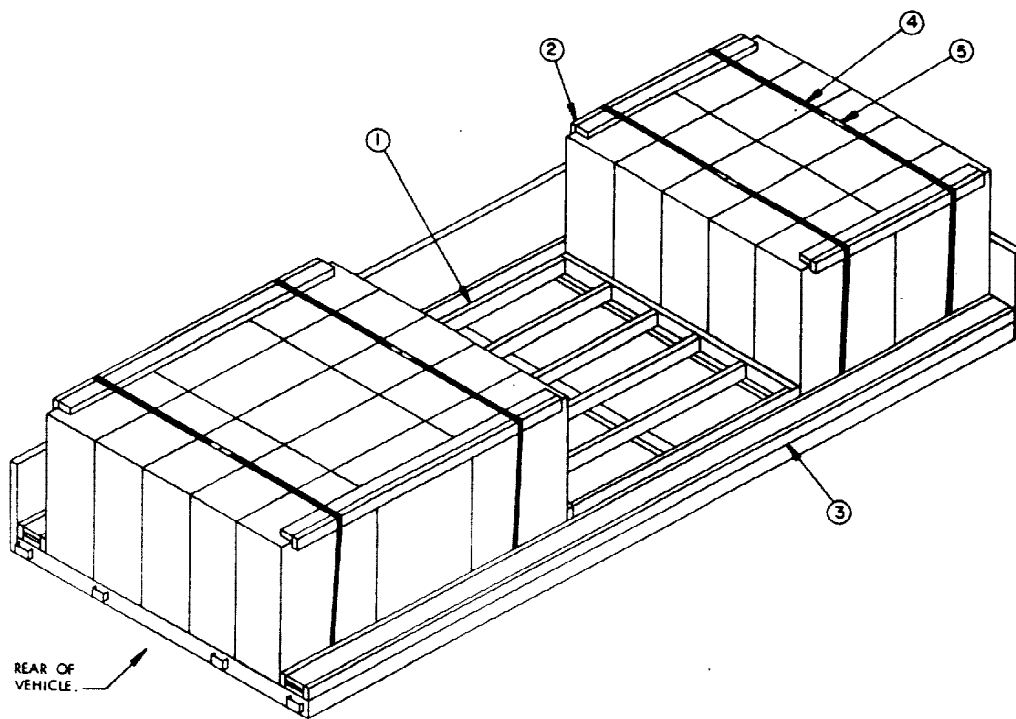
<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
SKIDDED UNIT	2	2,390 LBS



SIDE BLOCKING ASSEMBLY C



REAR BLOCKING ASSEMBLY E



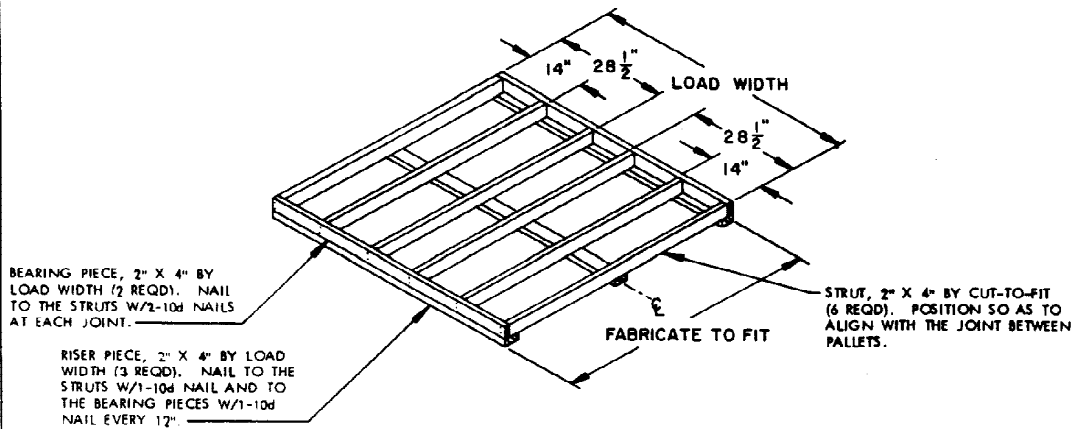
ISOMETRIC VIEW

SPECIAL NOTES:

1. A TYPICAL LOAD OF PALLETIZED SEPARATE LOADING PROJECTILES IS SHOWN ON THE TRUCK, HEAVY EXPANDED MOBILITY (HEMITT), 10-TON, M977 AND/OR M985, HAVING INSIDE DIMENSIONS OF 216-3/8" LONG BY 90-3/4" WIDE.
2. THE 155MM, 2/PALLET, SEPARATE LOADING PROJECTILE SHOWN IN THE ISOMETRIC VIEW ABOVE, HAS OVERALL DIMENSIONS OF 14-3/8" LONG BY 29-1/8" WIDE BY 38-3/8" HIGH AND A WEIGHT OF 830 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS.
3. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED OR TO SUIT THE SIZE AND/OR WEIGHT OF THE UNIT BEING LOADED. A LOAD CAN BE INCREASED OR REDUCED BY A MULTIPLE OF FIVE (5) UNITS AND USING THE SAME PROCEDURES SHOWN. A LOAD CAN BE REDUCED BY ONE (1) OR MORE PALLET UNITS BY USING A "FILLER ASSEMBLY" AS SHOWN ON PAGE 52 IN LIEU OF EACH OMITTED PALLET.

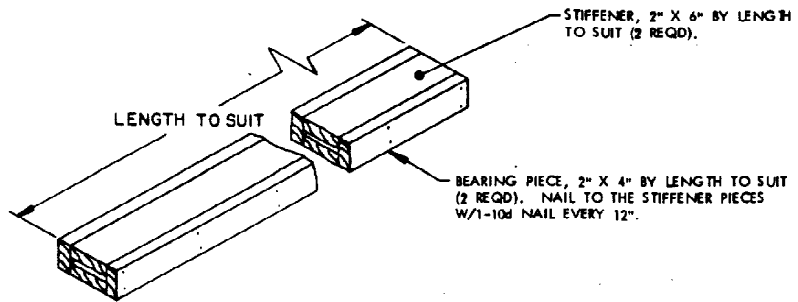
KEY NUMBERS

- ① CENTER BLOCKING (1 REQD). SEE THE "CENTER BLOCKING ASSEMBLY" DETAIL ON PAGE 65.
- ② ANTI-SWAY ASSEMBLY (4 REQD). SEE THE "ANTI-SWAY ASSEMBLY A" DETAIL ON PAGE 54.
- ③ SIDE BLOCKING (2 REQD). SEE THE "SIDE BLOCKING ASSEMBLY D" ON PAGE 65.
- ④ ANTI-SWAY STRAPPING, 1-1/4" X .035" OR .031" X 20' - 0" LONG STEEL STRAPPING (4 REQD). INSTALL TO ENCIRCLE FIVE (5) LATERALLY ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN.
- ⑤ SEAL FOR 1-1/4" STRAPPING (8 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.



CENTER BLOCKING ASSEMBLY

THIS ASSEMBLY IS FOR USE IN A LOAD OF SEPARATE LOADING PROJECTILES IN/ON AN M977 AND/OR M985 CARGO TRUCK.



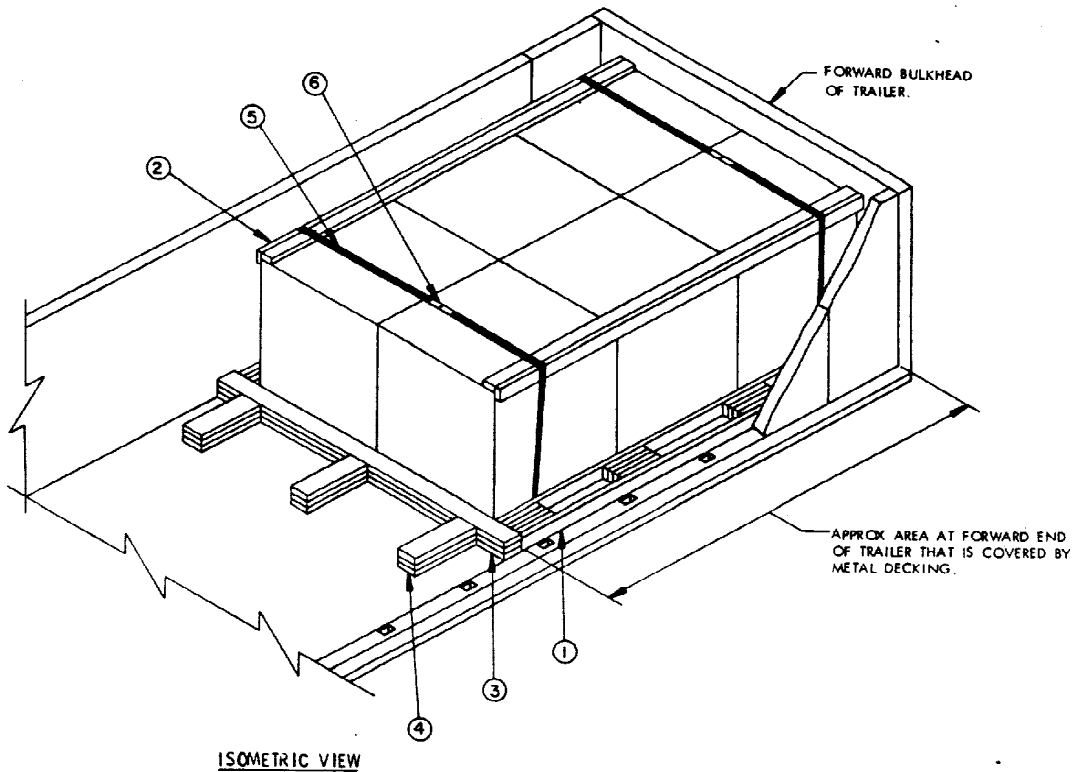
SIDE BLOCKING ASSEMBLY D

THIS ASSEMBLY IS FOR USE IN A LOAD OF SEPARATE LOADING PROJECTILES IN /ON AN M977 AND/OR M985 CARGO TRUCK. THE STIFFENER AND BEARING PIECES MAY BE MADE FROM RANDOM LENGTH PIECES, HOWEVER, THE JOINTS MUST BE STAGGERED.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	181	120
2" X 6"	72	72
NAILS	NO. REQD	POUNDS
10d (3")	242	3-3/4
STEEL STRAPPING, 1-1/4" X .035" OR .031" ----- 80' REQD ----- 11-1/2 LBS		
SEAL FOR 1-1/4" STRAPPING ----- 8 REQD ----- NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
155MM SLP-----	25-----	20,750 LBS
DUNNAGE-----		399 LBS
TOTAL WEIGHT-----		21,149 LBS (APPROX)



ISOMETRIC VIEW

SPECIAL NOTES:

1. A TYPICAL LOAD OF TWO SKIDDED UNITS OF BOXED AMMUNITION IS SHOWN ON A SEMITRAILER, DROPSIDE, 22-1/2-TON, M871, HAVING INSIDE DIMENSIONS OF 95-3/4" WIDE. TRAILERS OF OTHER DIMENSIONS MAY BE USED.
2. THE SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 36" LONG BY 37" WIDE BY 39" HIGH AND A WEIGHT OF 1,930 POUNDS. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS OF OTHER DIMENSIONS.
3. THE REAR BLOCKING PROCEDURES SHOWN ARE ONLY APPLICABLE FOR TRAILERS EQUIPPED WITH WOOD OR WOOD AND METAL FLOORS. FOR TRAILERS WITH NON-NAILABLE FLOORS, REFER TO THE PROCEDURES ON PAGE 16.
4. THE PROCEDURES DELINEATED ABOVE MAY ALSO BE USED WITH THE M872 DROPSIDE TRAILER MAKING ONLY THOSE ADJUSTMENTS REQUIRED FOR DIMENSIONAL VARIANCE OF THE TRAILERS.

KEY NUMBERS

- ① SIDE BLOCKING (2 REQD). SEE THE "SIDE BLOCKING ASSEMBLY B" DETAIL ON PAGE 58.
- ② ANTI-SWAY ASSEMBLY (2 REQD). SEE THE "ANTI-SWAY ASSEMBLY A" DETAIL ON PAGE 54.
- ③ REAR BLOCKING, 2" X 6" X TRAILER WIDTH MINUS 1/2" (TRIPLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/12-12d NAILS. NAIL EACH ADDITIONAL PIECE W/12-20d NAILS.
- ④ BACK-UP CLEAT, 2" X 6" X 18" (TRIPLED) (3 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/5-12d NAILS. NAIL EACH ADDITIONAL PIECE W/5-20d NAILS.
- ⑤ ANTI-SWAY STRAPPING, 1-1/4" X .035" OR .031" X 20' - 0" LONG STEEL STRAPPING (2 REQD). INSTALL TO ENCIRCLE TWO (2) LATERALLY ADJACENT UNITS AND THE "ANTI-SWAY ASSEMBLY" AS SHOWN.
- ⑥ SEAL FOR 1-1/4" STRAPPING (4 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "L" ON PAGE 2.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	113	75
2" X 6"	35	35
NAILS	NO. REQD	POUNDS
10d (3")	134	2
12d (3-1/4")	23	1/4
20d (4")	46	1-1/2
STEEL STRAPPING, 1-1/4" X .035" OR .031" --- 40' REQD --- 6 LBS		
SEAL FOR 1-1/4" STRAPPING --- 4 REQD --- NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
SKIDDED UNIT	6	11,580 LBS
DUNNAGE		230 LBS
TOTAL WEIGHT		11,810 LBS (APPROX)