LOADING, TIEDOWN, AND UNLOADING PROCEDURES FOR PALLETIZED BINARY CHEMICAL PROJECTILE, 155 MM, GB 2, M687, IN /ON TACTICAL VEHICLES

INDEX

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, AS LONG AS THEY COMPLY WITH GENERAL NOTE "D" ON PAGE 2.

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GENERAL NOTES

- THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1, AND IMPLEMENTS TM 39-20-7. RESTRICTIONS CONTAINED IN THAT MANUAL MUST BE OBSERVED.
- THIS DRAWING COVERS PROCEDURES APPLICABLE TO THE TRANSPORT OF PALLETIZED BINARY CHEMICAL PROJECTILES, 155MM, GB2, M687, IN/ON TACTICAL VEHICLES. IF OTHER TYPES OF CARGO ITEMS ARE TRANSPORTED WITH THOSE SHOWN, THE TOTAL LOAD/MUST BE COMPATIBLE AND THE ADDED TEMS MUST BE SECURED WITH WEB STRAP ASSEMBLIES, AS REQUIRED TO PREVENT DISPLACEMENT DURING TRANSPORTATION.
- LADING DATA:

FOR DETAIL OF THE PALLETIZED UNIT SEE PAGE 3 OF THIS DRAWING.

DIMENSIONS -----: 36" LONG BY 31-3/4" WIDE BY 25" HIGH. GROSS WEIGHT ----: 670 POUNDS (APPROX)

- DEPICTED PROCEDURES APPLY TO TACTICAL VEHICLES HAVING FACTORY IN-D. DEPICTED PROCEDURES APPLY TO TACTICAL VEHICLES HAVING FACTORY INSTALLED TIEDOWN ANCHORS AND/OR TACTICAL VEHICLES WHICH HAVE BEEN
 MODIFIED TO INCLUDE THE UNIVERSALLY APPLICABLE "TIEDOWN KIT" WHICH
 CONSISTS OF THE TIEDOWN FITTINGS OR ANCHOR DEVICES FOR INSTALLATION IN/ON CARGO BEDS, SIDE WALLS, AND/OR END WALLS, FOR USE WITH
 WEB STRAP TIEDOWN ASSEMBLIES. SEE PAGE 22 FOR GUIDANCE.
- WHENEVER POSSIBLE, LADING LOAD SHOULD BE CENTERED LATERALLY IN/ON WHENEVER POSSIBLE, LADING LOAD SHOULD BE CENTERED LATERALLY IN/ON CARRYING VEHICLE TO PROVIDE FOR EQUAL ANGLE HOLD DOWN BY THE SECURING WEB STRAP ASSEMBLIES. WHENEVER POSSIBLE, LADING SHOULD BE CENTERED LONGITUDINALLY (IN/ON THE CARRYING VEHICLE) BETWEEN THE SELECTED TIEDOWN FITTINGS TO BE USED, HOWEVER, DUE TO LADING WEIGHT, LADING SIZE, LADING CONFIGURATION, AND/OR LOCATION AND QUANTITY OF TIEDOWN ANCHORS WITHIN THE CARRYING VEHICLE IT MAY BE NECESSARY TO LOCATE THE LADING LONGITUDINALLY IN/ON A VEHICLE SELECTED WITHIN THIS DRAWING TO BE OVER FOR PROPER TIEDOWN AND HICLES SELECTED WITHIN THESE DRAWING TO BE OVER FOR PROPER TIEDOWN AND HICLES. AS SHOWN WITHIN THIS DRAWING TO PROVIDE FOR PROPER TIEDOWN AND TO ACHIEVE A MAXIMUM LOAD.
- WEB STRAP TIEDOWN ASSEMBLIES MUST BE SECURELY HOOKED INTO ANCHORING DEVICES ON THE TRANSPORTING VEHICLE AND FIRMLY TENSIONED. FIRMLY TENSIONED MEANS, WHEN THE OPERATOR PULLS ON THE RATCHET HANDLE BY HAND, THE RATCHET WILL NOT ADVANCE ANOTHER NOTCH. NO TYPE OF MECHANICAL EXTENSION OR LEVER WILL BE USED. EXERCISE CARE DURING STRAP APPLICATION. AVOID TWISTS IN STRAP TO THE EXTENT POSSIBLE (IF TIME PERMITS) BUT ENSURE THERE ARE NO KNOTS IN STRAP. ONTHE TAKE-UP SPOOL OF RATCHET, ENSURE STRAIGHT LAY OF STRAP WHEN TENSIONING. A FITER INITIAL WEBBING-TO-WEBBING CONTACT HAS SEEN MADE BY ROTATING THE TAKE-UP SPOOL INTIL NO METAL ON THE SPOOL IS SHOWING AND THE STRAP IS IN CONTACT WITH ITSELF, THE TENSIONED STRAP MUST FORM AT LEAST ONE-HALF BUT NOT MORE THAN ONE AND ONE-HALF WRAPS OF STRAP ON THE TAKE-UP SPOOL OF THE TENSIONING RATCHET. AFTER TENSIONING IS COMPLETED ENSURE THAT SPOOL LOKING LATCH IS FULLY SEATED AT BOTH ENDS OF SPOOL IN MATCHING LOCKING NOTCHES. TIE BACK THE LOOSE END OF STRAP AFTER TENSIONING IS COMPLETED. (LOOSE END MAY BE FOLDED AND TAPED OR TIED TO THE TENSION STRAP IF TIME PERMITS). FOR ADDITIONAL GUIDANCE, SEE DETAILS ON PAGE 23. WEB STRAP TIEDOWN ASSEMBLIES MUST BE SECURELY HOOKED
- ADDITIONAL GUIDANCE, SEE DETAILS ON PAGE 23.

 ADJUSTABLE SCUFF SLEEVES PROVIDED ON WEB STRAP ASSEMBLIES WILL

 BE LOCATED TO PROVIDE A PAD WHERE STRAPS PASS OVER SHARP EDGES,

 OR RATCHETS AND HOOKS ON PREVIOUSLY INSTALLED WEB STRAP TIE
 DOWN ASSEMBLIES. METAL PARTS OF A STRAP ASSEMBLY SHOULD BE

 LOCATED SO AS TO AVOID CONTACT WITH THE PROJECTILES. IF CON-TACT CANNOT BE AVOIDED, A SUITABLE ANTI-CHAFING MATERIAL, AS LISTED UNDER THE MATERIAL SPECIFICATIONS BELOW, MUST BE POSITIONED BETWEEN THE METAL PARTS OF A STRAP ASSEMBLY AND THE PROJECTILES AND IF NECESSARY, TAPED OR TIED IN POSITION.
- IF THE SIDE RACKS FOR THE SEMITRAILER ARE TO TRANSPORTED ON THE IF THE SIDE RACKS FOR THE SEMITRAILER ARE 10 IRANSPORTED ON THE LOADED TRAILER, THEY WILL BE STACKED ON THE TRAILER AND SECURED WITH A SUFFICIENT QUANTITY OF WEB STRAP TIEDOWN ASSEMBLES TO PREVENT LOSS DURING TRANSPORT. NOTE: IF DESIRED, THE SIDE RACKS FOR THE MA71 AND M872 SEMITRAILERS MAY BE POSITIONED IN PLACE AFTER THE LOAD HAS BEEN SECURED.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

<u>STRAP</u> -----: WEBBING, UNIVERSAL TIEDOWN, NSN 5340-00-980-9277 PN 10900880; OR NSN 1670-00-725-1437, PN 1376-013. ALTERNATIVE: NSN 5340-01-089-4997, PN 11669588, OR NSN 5340-01-204-3009, PN 9392419. ANTI-CHAFING

---: CANVANS, BURLAP, TAPE OR ANY OTHER SUTIABLE MATERIAL.

LUMBER -----: SEE TM 743-200-1, DUNNAGE LUMBER; FED SPEC MM-L-751.

NAILS -----: COMMON, FED SPEC FF-N-105.

CLASS 1, TYPE I OR IV, HEAVY DUTY, FINISH A, B (GRADE 2), OR C, FED SPEC QQ-S-781. STRAPPING, STEEL:

TYPE D, STYLE I, II, OR \overline{M} , CLASS H, FINISH A, B (GRADE 2), OR C, FED SPEC QQ-S-781 . STRAP SEAL ----:

STRAP STAPLE ----: COMMERCIAL GRADE.

GROUP B, CONSTRUCTION AND INDUSTRIAL PLYWOOD, INTERIOR WITH EXTERIOR GLUE, GRADE C-D. IF SPECIFIED GRADE IS NOT AVAILABLE, A BETTER INTERIOR OR AN EXTERIOR GRADE MAY BE SUBSTITUTED; FED SPEC NN-P-530. PLYWOOD ----:

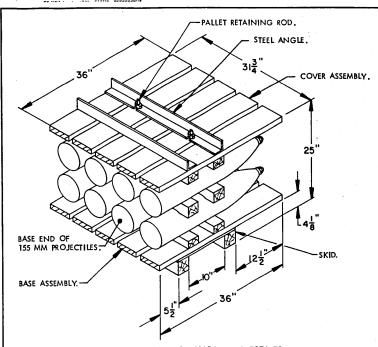
(GENERAL NOTES CONTINUED)

- J. PROCEDURES DEPICTED HEREIN ARE TYPICAL IN NATURE RELATIVE TO ITEM LOCATION IN/ON THE VEHICLES AND THE QUANTITIES SHOWN, ITEM LOCATION AND QUANTITIES OF THE DESIGNATED ITEM MAY BE VARIED TO SATISFY OPERATIONAL REQUIREMENTS, PROVIDED LOADING AND TIEDOWN PRINCIPLES SPECIFIED HEREIN ARE RETAINED.
- K. THE TIEDOWN METHODS WITHIN THIS DRAWING SHOW TWO HOOKS TO BE CONNECTED TO ONE TIEDOWN EYE. THIS IS AUTHORIZED AS SPECIFIED HEREIN AND MEETS THE INTENT OF THE REQUIREMENTS CITED IN TB 9-2300-280-30.
- CONVERSION TO METRIC EQUIVALENTS; DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES, AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY THE METRIC EQUIVALENTS MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM, AND ONE POUND EQUALS 0.454KG.
- M. ONLY THE CARGO BODIES OR BEDS OF THE TACTICAL VEHICLES HAVE BEEN SHOWN HEREIN TO PREVENT DISTRACTION FROM THE DELINEATED LOADING AND TIEDOWN PROCEDURES, AND ARE SHOWN IN OUTLINE FORM WITH THE STRUCTURAL PORTIONS OMITTED AS NECESSARY TO IMPROVE THE CLARITY OF THE DEPICTED PROCEDURES.
- N. WHEN LOADING SINGLE LAYER LOADS IN/ON A TACTICAL VEHICLE READ THE "LOADING TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. USE THE "ISOMETRIC VIEW" ON PAGES 4 AND 13, WHICH ARE PICTORIAL VIEWS OF A TYPICAL LOAD IN/ON A TACTICAL VEHICLE, ALONG WITH THE "TOP VIEW" ON PAGES 5 THROUGH 14, WHICH DEPICT LOADS IN/ON TYPICAL TACTICAL VEHICLES.
- O. FOR MAXIMUM LOADS THE PALLETIZED UNITS MAY BE STACKED TWO-HIGH AND LOADED AS SHOWN ON PAGES 15 THROUGH 21.
- IF WEB STRAP TIEDOWN ASSEMBLIES ARE NOT AVAILABLE, USE THE ALTERNATIVE PROCEDURES FOR TRANSPORTING THE PALLETIZED PROJECTILES, SHOWN ON PAGES 24 THROUGH 36, WHEN USING THESE PROCEDURES THE PALLETIZED UNITS MAY SWAY SLIGHTLY LONGITUDINALLY AND LATERALLY, AND MAY JUMP VERTICALLY. HOWEVER, THIS IS AN ACCEPTED CHARACTERISTIC FOR THESE LOADS. FOR THESE LOADS.
- Q. FOR ADDITIONAL GUIDANCE ATTENTION IS DIRECTED TO THE "LOADING TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 AND THE "SPECIAL NOTES" SECTION ON EACH PAGE DEPICTING LOADING AND TIEDOWN PROCEDURES.

REVISIONS

REVISION NO. 1, DATED JUNE 1989, CONSISTS OF:

- ADDED PROCEDURES FOR STACKING THE PALLETIZED UNITS TWO-HIGH.
- ADDED ALTERNATIVE PROCEDURES FOR TRANSPORTING THE PALLETIZED PROJECTILES.



PALLETIZED BINARY CHEMICAL PROJECTILES

LOADING, TIEDOWN, AND UNLOADING PROCEDURES

- SET BRAKES ON TRANSPORTING VEHICLE AND REMOVE CANVAS COVER AND BOWS, IF NECESSARY. IF LOADING IS TO BE ACCOMPLISHED WITH A FORKLIFT TRUCK LOWER TAIL GATE, OR DROP SIDE, ON THE CARGO TRUCK. IF THE TRANSPORTING VEHICLE IS A SEMITRAILER WITH SIDE RACKS, THE SIDE RACKS MUST BE REMOVED TO PERMIT INSTALLATION OF THE WEB STRAP TIEDOWN ASSEMBLIES. SEE GENERAL NOTE "H" ON PAGE 2.
- THE LOADS SHOWN ON PAGES 4 THROUGH 14 DEPICT TYPICAL ONE-LAYER HIGH LOADS. IF LESS PALLETIZED UNITS THAN SHOWN ARE TO BE TRANSPORTED, FOLLOW THESE SAME PROCEDURES. NOTE: IN ORDER TO ACHIEVE MAXIMUM ONE-LAYER HIGH LOADS THE PALLETIZED UNITS ARE POSITIONED MAXIMUM ONE-LAYER HIGH COADS THE FALLETIZED UNITS ARE FOSTIONED AGAINST THE FORWARD END WALL OF THE VEHICLE AND BUTTED TOGETHER LONGITUDINALLY, HOWEVER, THE PALLETIZED UNITS MAY BE POSITIONED ANYWHERE WITHIN THE LENGTH OF THE VEHICLE AND DO NOT HAVE TO BE BUTTED TOGETHER. EACH PALLETIZED UNIT, AND/OR TWO PALLETIZED UNITS BUTTED TOGETHER ACROSS THE WIDTH OF THE VEHICLE, REQUIRES TWO WEB STRAP TIEDOWN ASSEMBLIES FOR SECUREMENT TO THE VEHICLE.
- THE LOADS SHOWN ON PAGES 15 THROUGH 21 DEPICT TYPICAL MAXIMUM LOADS OF TWO-HIGH PALLETIZED UNITS. IF LESS PALLETIZED UNITS THAN SHOWN ARE TO BE TRANSPORTED, FOLLOW THESE SAME PROCEDURES AND/OR THE PROCEDURES SHOWN ON PAGES 4 THROUGH 14. NOTE: WHEN STACKING PALLETIZED UNITS ASSURE THAT THE TOP PALLET IS IN VERTICAL ALIGNMENT WITH THE BOTTOM PALLET.
- THE PALLETIZED PROJECTILES MAY BE LOADED IN/ON A VEHICLE WITH THE THE PALLETIZED PROJECTILES MAY BE LOADED IN/ON A VEHICLE WITH THE NOSE END OF THE PROJECTILES POINTED LATERALLY AS SHOWN IN THE LOAD ON PAGES 4 AND 17, OR WITH THE NOSE END OF THE PROJECTILES POINTING LONGITUDINALLY AS SHOWN IN THE LOAD ON PAGES 13 AND 16. THE PALLETIZED UNIT IS ONLY FORKLIFTABLE FROM TWO SIDES SO IT SHOULD BE DETERMINED PRIOR TO LOADING IF THE PALLETIZED UNITS ARE TO BE LOADED WITH A FORKLIFT OR BY SLINGING. SEE SPECIAL NOTE 2 ON THIS PAGE.
- WHEN LOADING TWO PALLETIZED UNITS ACROSS THE VEHICLE WIDTH WITH WHEN LOADING TWO PALLETIZED UNITS ACROSS THE VEHICLE WIDTH WITH THE NOSE END OF THE PROJECTILES POINTED LATERALLY, ALWAYS POSITION THE BASE ENDS IN THE CENTER OF THE VEHICLE WIDTH, BUTTED TOGETHER, AS SHOWN IN THE LOAD ON PAGES 4 AND 17. WHEN LOADING TWO PALLETIZED UNITS ACROSS THE VEHICLE WIDTH WITH THE NOSE END OF THE PROJECTILES POINTED LONGITUDINALLY, ALWAYS POSITION IN SUCH A MANNER THAT THE STEEL ANGLES ON THE COVER ASSEMBLY ARE IN LINE ON EACH TWO LATERALLY ADJACENT PALLETIZED UNITS, AS SHOWN IN THE LOAD ON PAGES 13 AND 16.
- POSITION ADJUSTABLE SCUFF SLEEVES WHERE THE WEB STRAP PASSES OVER AND/OR AGAINST THE STEEL ANGLES ON TOP OF THE PALLETIZED UNIT COVER ASSEMBLY, AND/OR THE EDGES OF THE COVER ASSEMBLY.
- WHEN POSITIONING THE TWO WEB STRAP TIEDOWN ASSEMBLIES OVER THE TOP OF TWO LATERALLY ADJACENT PALLETIZED UNITS, BUTTED TOGETHER ACROSS THE VEHICLE WIDTH, AS SHOWN IN THE LOAD ON PAGE 10, AND/OR ONE PALLETIZED UNIT, POSITIONED IN THE CENTER OF THE VEHICLE WIDTH, AS SHOWN IN THE LOAD ON PAGE 13, SELECT TWO TIEDOWN ANCHORS ON EACH SIDEOF THE VEHICLE FAR ENOUGH APART TO PROVIDE GOOD HOLD-DOWN AND LONGITUDINAL RESTRAINT. ATTACH ONE END OF THE STRAP TO A VEHICLE TIEDOWN ANCHOR, POSITION THE STRAP OVER THE TOP OF BOTH PALLETIZED UNITS, STAYING TO THE OUTSIDE OF THE STEEL ANGLES ON THE COVER ASSEMBLY, DOWN TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE, TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. THE TWO HOLD-DOWN STRAPS POSITIONED OVER THE TOP OF ONE PALLETIZED UNIT, OR TWO LATERALLY ADJACENT PALLETIZED UNITS, MUST ALWAYS BE CROSSED AS SHOWN TO PROVIDE HOLD-DOWN AND LONGITUDINAL RESTRAINT.

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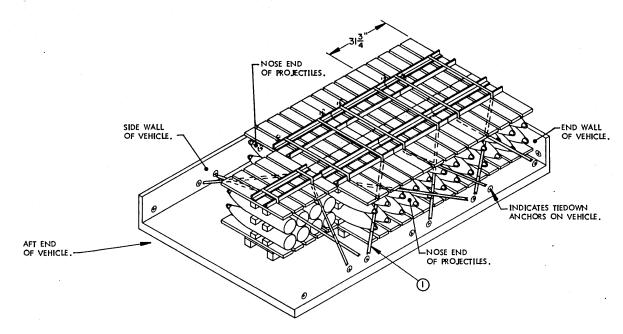
PALLETIZED UNIT DETAIL

SPECIAL NOTES:

- 1. THE PALLETIZED UNIT IS FORKLIFTABLE FROM TWO SIDES ONLY,
- THE PALLETIZED UNIT MAY BE LOADED IN/ON A TACTICAL VEHICLE BY USE OF A SLING, IF DESIRED. POSITION THE SLING LEGS UNDER THE BASE OF THE PALLETIZED UNIT AND AGAINST THE OUTSIDE SURFACE OF THE SKIDS.
- PRIOR TO LOADING PALLETIZED UNITS IN/ON A VEHICLE CHECK ALIGNMENT OF STEEL ANGLES ON COVER ASSEMBLY TO ASSURE THAT THE PALLET RETAINING RODS ARE IN POSITION. TIGHTEN NUTS ON PALLET RETAINING RODS, IF NECESSARY.
- PRIOR TO LOADING PALLETIZED UNITS IN/ON A VEHICLE ASSURE THAT ALL PROJECTILES ARE IN PROPER POSITION AND IN ALIGNMENT WITH EACH OTHER.

(LOADING, TIEDOWN, AND UNLOADING PROCEDURES CONTINUED)

- WHEN POSITIONING THE TWO WEB STRAPS OVER THE TOP OF TWO LATERALLY ADJACENT PALLETIZED UNITS, BUTTED TOGETHER ACROSS THE VEHICLE WIDTH AND/OR OVER THE TOP OF ONE PALLETIZED UNIT POSITIONED IN THE CENTER OF THE VEHICLE WIDTH, AS SHOWN IN THE LOADS ON PAGES 4 AND 6. SELECT TWO TIEDOWN ANCHORS ON EACH SIDE OF THE VEHICLE, FAR ENOUGH APART TO PROVIDE ROOM TO WORK THE STRAP RATCHET AND AVOID CONTACT BETWEEN THE STRAP RATCHET AND THE PROJECTILES. IF CONTACT CANNOT BE AVOIDED POSITION ANTI-CHAPING MATERIAL, AS INSTRUCTED IN GENERAL NOTE "G" ON PAGE 2, BETWEEN THE STRAP RATCHET AND THE PROJECTILES AT ALL POINTS OF CONTACT.
- ATTACH THE RATCHET END OF A STRAP TO A VEHICLE TIEDOWN ANCHOR. THREAD THE STRAP OVER/UNDER THE NOSE END OF THE PROJECTILES, UP THRU THE SLOT BETWEEN THE FIRST AND SECOND BOARDS IN THE COVER ASSEMBLY, OVER TOP OF ALL FOUR STEEL ANGLES ON THE COVER ASSEMBLIES, DOWN THRU THE SLOT BETWEEN THE FIRST AND SECOND BOARDS IN THE COVER ASSEMBLY ON THE LATERALLY ADJACENT PALLETIZED UNIT, OVER/UNDER THE NOSE END OF THE PROJECTILES TO A VEHICLE TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. THE TWO HOLD DOWN STRAPS POSITIONED OVER THE TOP OF ONE PALLETIZED UNITS, MUST ALWAYS BE CROSSED AS SHOWN TO PROVIDE HOLDDOWN AND LONGITUIDNAL RESTRAINT. SEE THE "ISOMETRIC VIEW" ON PAGE 4 FOR ADDITIONAL GUIDDANCE WHEN POSITIONING THE WEB STRAP TIEDOWN ASSEMBLIES IN THE GUIDANCE WHEN POSITIONING THE WEB STRAP TIEDOWN ASSEMBLIES IN THE LOADS SHOWN ON PAGES 4 THROUGH 12.
- IF DESIRED, A SLING MAY BE USED TO POSITION THE PALLETIZED UNIT (\$) IN/ON A TACTICAL VEHICLE. POSITION THE SLING LEGS UNDER THE BASE OF THE PALLETIZED UNIT AND AGAINST THE OUTSIDE SURFACE OF THE SKIDS.
- WHEN LOADING ONE WIDE PALLETIZED UNITS IN SMALL VEHICLES, AS SHOWN WHEN COADING ONE WIDE PALLETIZED UNITS IN SMALL VEHICLES, AS 3 HOW IN THE M37, 3/4 TON, CARGO TRUCK, ON PAGE 5, REVERSE THE NOSE END OF THE PROJECTILES TO BALANCE THE LOAD, OR, POSITION THE PALLETIZED UNITS WITH THE NOSE END OF THE PROJECTILES ON THE SAME SIDE OF THE VEHICLE AND POSITIONED OFF-CENTER LATERALLY TO HELP BALANCE THE
- UNLOADING IS ESSENTIALLY THE REVERSE OF THE LOADING AND TIEDOWN PROCEDURES



ISOMETRIC VIEW

SPECIAL NOTES:

- A TYPICAL LOAD OF SEVEN PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO, 2-1/2-TON, M35, HAVING INSIDE DIMENSIONS OF 147" LONG BY 88" WIDE.
- THE TYPICAL LOAD OF SEVEN PALLETIZE HIGHWAY LOAD LIMIT FOR THIS VEHICLE. LOAD OF SEVEN PALLETIZED UNITS IS BASED ON THE OFF-
- 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 OR ON THE FLOOR, MAY BE USED.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE.
- A TOTAL OF EIGHT WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.
- THE LOAD ON THIS PAGE IS SHOWN IN "ISOMETRIC" AND IS TO BE USED FOR GUIDANCE ALONG WITH THE "TOP VIEWS" OF VEHICLES SHOWN ON PAGES 5 THROUGH 12, WHEN LOADING SINGLE LAYER LOADS.

KEY NUMBER

(1) WEB STRAP TIEDOWN ASSEMBLY (8 REQD), INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE OVER TOP OF PALLETIZED UNIT(S), AS INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3, TO A TIEDOWN ANCHOR ON OPPOSITE SIDE OF VEHICLE. TAKE UP SLACK IN STRAP AND THEN RATCHET TICKLY SEE CHERAL NOTES 18" TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

LOAD AS SHOWN

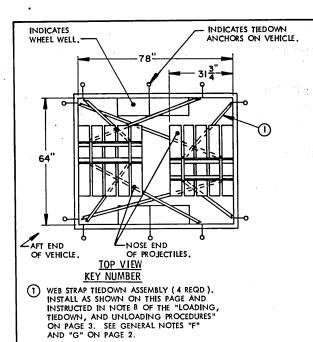
ITEM

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT-----7------ 4,690 LBS

TRUCK, CARGO, 2-1/2-TON, M35 AND/OR M211



- A TYPICAL LOAD OF TWO PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO, 3/4-TON, M37, HAVING INSIDE DIMENSIONS OF 78" LONG BY 64" WIDE.
- 2. THE TYPICAL LOAD OF TWO PALLETIZED UNITS IS BASED ON THE OFF-HIGH-WAY LOAD LIMIT AND/OR SIZE OF THIS VEHICLE.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- 4. A TOTAL OF FOUR WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

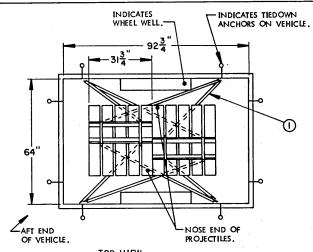
LOAD AS SHOWN

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT-----2------1,340 LBS

TRUCK, CARGO, 3/4-TON, M37



TOP VIEW

KEY NUMBER

WEB STRAP TIEDOWN ASSEMBLY (4 REQD).
INSTALL AS SHOWN ON THIS PAGE AND
INSTRUCTED IN NOTE 8 OF THE "LOADING,
TIEDOWN, AND UNLOADING PROCEDURES"
ON PAGE 3. SEE GENERAL NOTES "F"
AND "G" ON PAGE 2. ①

SPECIAL NOTES:

ITEM

- A TYPICAL LOAD OF TWO PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO, 1-1/4-TON, M715, HAVING INSIDE DIMENSIONS OF 92-3/4" LONG BY 64" WIDE
- 2. THE TYPICAL LOAD OF TWO PALLETIZED UNITS IS BASED ON THE OFF-HIGH-WAY LOAD LIMIT AND/OR SIZE OF THIS VEHICLE.
- 3. READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISO-METRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- A TOTAL OF FOUR WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

LOAD AS SHOWN

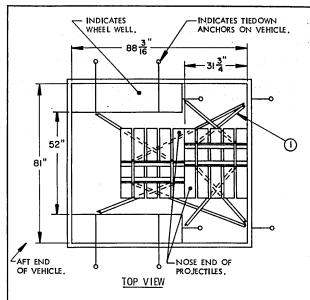
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QUANTITY

WEIGHT (APPROX)

-1,340 LBS PALIETIZED UNIT-----2----

TRUCK, CARGO, 1-1/4-TON, M715



KEY NUMBER

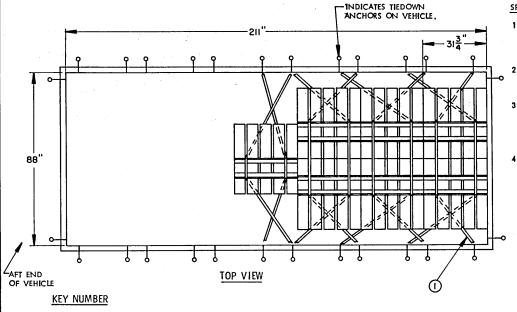
(1) WEB STRAP TIEDOWN ASSEMBLY (4 REQD).
INSTALL AS SHOWN ON THIS PAGE AND
INSTRUCTED IN NOTE 8 OF THE "LOADING
TIEDOWN, AND UNLOADING PROCEDURES"
ON PAGE 3. SEE GENERAL NOTES "F"
AND "G" ON PAGE 2.

SPECIAL NOTES

- A TYPICAL LOAD OF TWO PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO CARRIER, 1-1/4-TON, M561, HAVING INSIDE DIMENSIONS OF 88-3/16" LONG BY 81" WIDE.
- THE TYPICAL LOAD OF TWO PALLETIZED UNITS IS BASED ON THE OFF-HIGHWAY LOAD LIMIT AND/OR SIZE OF THIS VEHICLE.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3
 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- A TOTAL OF FOUR WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

LOAD AS SHOWN

TRUCK, CARGO, CARRIER, 1-1/4-TON, M561



SPECIAL NOTES:

- A TYPICAL LOAD OF SEVEN PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO, 2-1/2-TON, M&, HAVING INSIDE DIMENSIONS OF 211" LONG BY 88" WIDE.
- 2. THE TYPICAL LOAD OF SEVEN PALLETIZED UNITS IS BASED ON THE OFF-HIGHWAY LOAD LIMIT OF THIS VEHICLE.
- READ THE "LOADING, TIEDOWN, AND UN-LOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE, ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- . A TOTAL OF EIGHT WEB STRAP TIEDOWN
 ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN

(1) WEB STRAP TIEDOWN ASSEMBLY (B REQD).
INSTALL AS SHOWN ON THIS PAGE AND
INSTRUCTED IN NOTE B OF THE "LOADING
TIEDOWN, AND UNLOADING PROCEDURES"
ON PAGE 3. SEE GENERAL NOTES "F"
AND "G" ON PAGE 2.

LOAD AS SHOWN

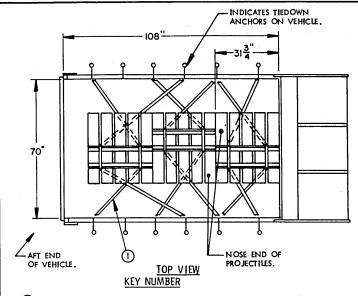
<u>ITEM</u>

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT----7-------------------4,690 LBS

TRUCK, CARGO, 2-1/2-TON, M36 AND/OR M36C



(1) WEB STRAP TIEDOWN ASSEMBLY (6 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

SPECIAL NOTES:

- A TYPICAL LOAD OF THREE PALLETIZED UNITS IS SHOWN IN A TRUCK, DUMP, 2-1/2-TON, M59, HAVING INSIDE DIMENSIONS OF 108" LONG BY 70" WIDE.
- 2. THE TYPICAL LOAD OF THREE PALLETIZED UNITS IS BASED ON THE SIZE OF THIS VEHICLE.
- 3. READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- A TOTAL OF SIX WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

LOAD AS SHOWN

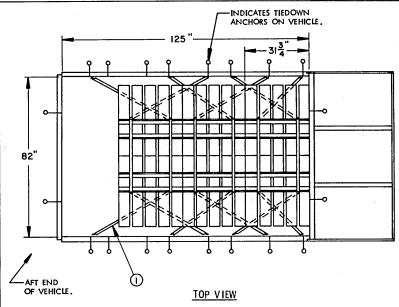
ITEM

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT------ 2,010 LBS

TRUCK, DUMP, 2-1/2-TON, M59 OR M215



KEY NUMBER

WEB STRAP TIEDOWN ASSEMBLY (6 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

SPECIAL NOTES:

- 1. A TYPICAL LOAD OF SIX PALLETIZED UNITS IS SHOWN IN A TRUCK, DUMP, 5-TON, M51, HAVING INSIDE DIMENSIONS OF 125" LONG BY 82" WIDE.
- 2. THE TYPICAL LOAD OF SIX PALLETIZED UNITS IS BASED ON THE SIZE OF THIS VEHICLE.
- 3. READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- 4. A TOTAL OF SIX WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

LOAD AS SHOWN

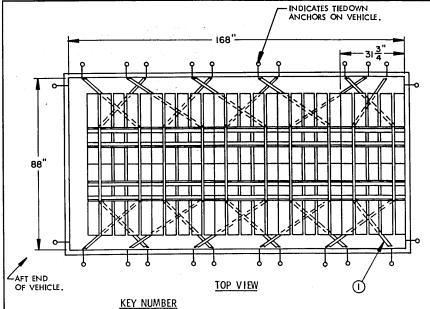
ITEM

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT-----6-----4,020 LBS

TRUCK, DUMP, 5-TON, M51



(1) WEB STRAP TIEDOWN ASSEMBLY (10 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND

"G" ON PAGE 2.

SPECIAL NOTES:

- A TYPICAL LOAD OF TEN PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO, 5-TON, M54, HAVING INSIDE DIMENSIONS OF 168" LONG BY 88" WIDE.
- THE TYPICAL LOAD OF TEN PALLETIZED UNITS IS BASED ON THE SIZE OF THIS VEHICLE.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- A TOTAL OF TEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

LOAD AS SHOWN

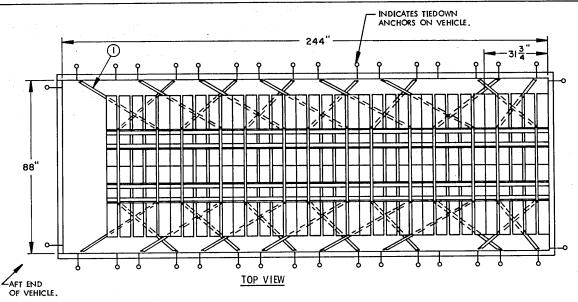
QUANTITY

ITEM

WEIGHT (APPROX)

PALLETIZED UNIT-----10-----6,700 LBS

TRUCK, CARGO, 5-TON, M54



KEY NUMBER

(1) WEB STRAP TIEDOWN ASSEMBLY (14 REQD.). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

SPECIAL NOTES:

PAGE 8

- A TYPICAL LOAD OF FOURTEEN PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO, 5-TON, M55, HAVING INSIDE DIMENSIONS OF 244" LONG BY 88" WIDE.
- 2. THE TYPICAL LOAD OF FOURTEEN PALLETIZED UNITS IS BASED ON THE SIZE OF THIS VEHICLE.

(CONTINUED AT RIGHT)

TRUCK, CARGO, 5-TON, M55

(SPECIAL NOTES CONTINUED)

- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- A TOTAL OF FOURTEEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

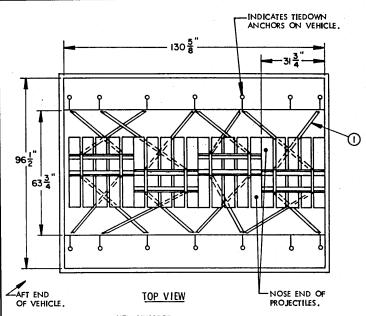
LOAD AS SHOWN

ITEM

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT----- 9,380 LBS



KEY NUMBER

(1) WEB STRAP TIEDOWN ASSEMBLY (8 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

SPECIAL NOTES:

- A 'TYPICAL LOAD OF FOUR PALLETIZED UNITS IS SHOWN IN A CARRIER, CARGO, TRACKED, 6-TON, M548 (DECK DOWN), HAVING INSIDE DIMEN-SIONS OF 130-5/8" LONG BY 96-1/2" WIDE.
- THE TYPICAL LOAD OF FOUR PALLETIZED UNITS IS BASED ON THE SIZE OF THIS VEHICLE.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3
 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISO-METRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- A TOTAL OF EIGHT WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

LOAD AS SHOWN

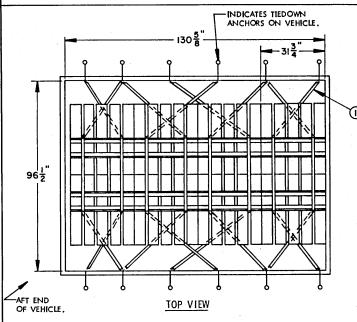
TEM

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT------ 2.680 LBS

CARRIER, CARGO, TRACKED, 6-TON, M548 (DECK DOWN)



KEY NUMBER

(1) WEB STRAP TIEDOWN ASSEMBLY (8 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

SPECIAL NOTES:

- A TYPICAL LOAD OF EIGHT PALLETIZED UNITS IS SHOWN IN A CARRIER, CARGO, TRACKED, 6-TON, M548 (DECK UP), HAVING INSIDE DIMEN-SIONS OF 130-5/8" LONG BY 96-1/2" WIDE.
- THE TYPICAL LOAD OF EIGHT PALLETIZED UNITS IS BASED ON THE SIZE OF THIS VEHICLE.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3
 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- A TOTAL OF EIGHT WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

LOAD AS SHOWN

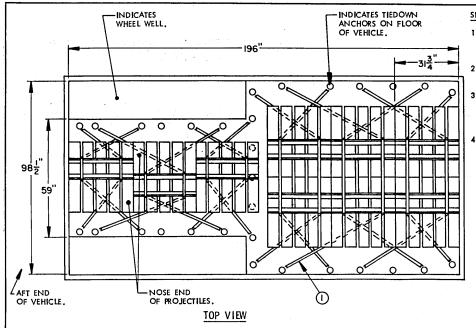
ITEM

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT----8-----5,360 LBS

CARRIER, CARGO, TRACKED, 6-TON, M548 (DECK UP)



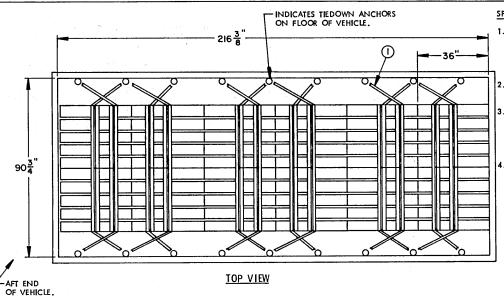
- A TYPICAL LOAD OF NINE PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO, 8-TON, M520, HAVING INSIDE DIMENSIONS OF 196" LONG BY 98-1/2" WIDE,
- THE TYPICAL LOAD OF NINE PALLETIZED UNITS IS BASED ON THE SIZE OF THIS VEHICLE.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PRO-CEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- 4. A TOTAL OF TWELVE WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

KEY NUMBER

(1) WEB STRAP TIEDOWN ASSEMBLY (12 REQD), INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

LOAD AS SHOWN

TRUCK, CARGO, 8-TON, M520



SPECIAL NOTES:

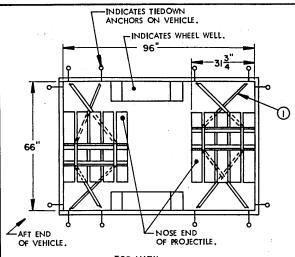
- A TYPICAL LOAD OF TWELVE PALLETIZED UNITS IS SHOWN IN A TRUCK, HEAVY EXPANDED MOBILITY, 10-TON, M977 AND/OR M985, HAV-ING INSIDE DIMENSIONS OF 216-3/8" LONG BY 90-3/4" WIDE.
- THE TYPICAL LOAD OF TWELVE PALLETIZED UNITS IS BASED ON THE SIZE OF THIS VEHICLE.
- READ THE "LOADING, TIEDOWN, AND UNLOAD-ING PROCEDURES" ON PAGE 3 PRIOR TO SECUR-ING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDI-TIONAL GUIDANCE.
- A TOTAL OF TWELVE WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

KEY NUMBER

(1) WEB STRAP TIEDOWN ASSEMBLY (12 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 7 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

LOAD AS SHOWN

TRUCK, HEAVY EXPANDED MOBILITY, 10-TON, M977 AND/OR M985



TOP VIEW

KEY NUMBERS

(1) WEB STRAP TIEDOWN ASSEMBLY (4 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND

SPECIAL NOTES:

- A TYPICAL LOAD OF TWO PALLETIZED UNITS IS SHOWN IN A TRAILER, CARGO, 3/4-TON, M101, HAVING INSIDE DIMENSIONS OF 96" LONG BY 66"
- THE TYPICAL LOAD OF TWO PALLETIZED UNITS IS BASED ON THE OFF-HIGH-WAY LOAD LIMIT AND/OR SIZE OF THIS VEHICLE.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- A TOTAL OF FOUR WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN .

LOAD AS SHOWN

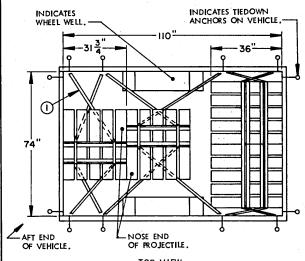
ITEM

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT----2----- 1,340 LBS

TRAILER, CARGO, 3/4-TON, M101



TOP VIEW

KEY NUMBER

(1) WEB STRAP TIEDOWN ASSEMBLY (6 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTES 7 AND 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

SPECIAL NOTES:

- A TYPICAL LOAD OF FOUR PALLETIZED UNITS IS SHOWN IN A TRAILER, CARGO, 1-1/2-TON, M105, HAVING INSIDE DIMENSIONS OF 110" LONG BY 74" WIDE.
- THE TYPICAL LOAD OF FOUR PALLETIZED UNITS IS BASED ON THE OFF-HIGHWAY LOAD LIMIT AND/OR SIZE OF THIS VEHICLE.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- A TOTAL OF SIX WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

LOAD AS SHOWN

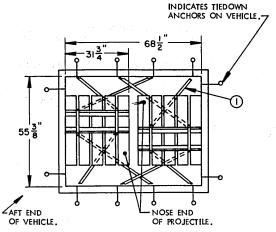
ITEM

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT----- 2,680 LBS

TRAILER, CARGO, 1-1/2-TON, M105



TOP VIEW

KEY NUMBER

WEB STRAP TIEDOWN ASSEMBLY (4 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

SPECIAL NOTES:

- A TYPICAL LOAD OF TWO PALLETIZED UNITS IS SHOWN IN A TRAILER, AMMUNITION, 1-1/2-TON, M332, HAVING INSIDE DIMENSIONS OF 68-1/2" LONG BY 55-3/8" WIDE.
- THE TYPICAL LOAD OF TWO PALLETIZED UNITS IS BASED ON THE SIZE OF THIS VEHICLE.
- 3. READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN/ON THE VEHICLE. ALSO, SEE THE ISOMETRIC VIEW" ON PAGE 4, FOR ADDITIONAL GUIDANCE.
- 4. A TOTAL OF FOUR WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

LOAD AS SHOWN

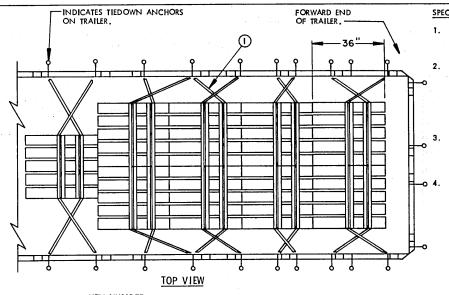
ITEM

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT-----2----- 1,340 LBS

TRAILER, AMMUNITION, 1-1/2-TON, M332



SPECIAL NOTES:

- A TYPICAL LOAD OF NINE PALLETIZED UNITS IS SHOWN ON A SEMITRAILER, STAKE, 12-TON, M127, HAVING DIMEN-SIONS OF 388" LONG BY %" WIDE.
- 2. A PARTIAL LOAD OF NINE PALLETIZED UNITS IS SHOWN. HOWEVER, A MAXIMUM LOAD OF EIGHTEEN PALLETIZED UNITS CAN BE LOADED ON THE TRAILER BY POSITIONING THEM TWO ACROSS AND NINE LONG IN THE SAME MANNER AS SHOWN. SECURE EACH TWO LATERALLY ADJACENT PALLETIZED UNITS WITH TWO CROSSED WEB STRAPS AS SHOWN.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PRO-CEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD ON THE TRAILER. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 13, FOR ADDITIONAL GUIDANCE.
- . A TOTAL OF TEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

KEY NUMBER

(1) WEB STRAP TIEDOWN ASSEMBLY (10 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 7 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

LOAD AS SHOWN

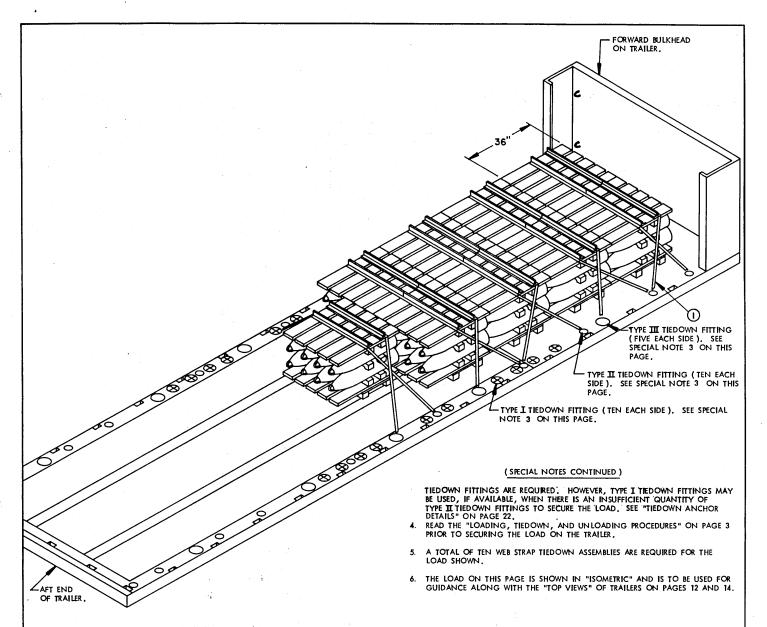
TEM

QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT------9------ 6,030 LBS

SEMITRAILER, STAKE, 12-TON, M127



ISOMETRIC VIEW

KEY NUMBER

(1) WEB STRAP TIEDOWN ASSEMBLY (10 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 7 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

SPECIAL NOTES

- A TYPICAL LOAD OF NINE PALLETIZED UNITS IS SHOWN ON A TRAILER, 22-1/2-TON, M871, HAVING DIMENSIONS OF 354" LONG BY 96" WIDE.
- 2. A PARTIAL LOAD OF NINE PALLETIZED UNITS IS SHOWN. HOWEVER, A MAXIMUM LOAD OF EIGHTEEN PALLETIZED UNITS CAN BE LOADED ON THE TRAILER BY POSITIONING THEM TWO ACROSS AND NINE LONG IN THE SAME MANNER AS SHOWN ABOVE. SECURE EACH TWO LATERALLY ADJACENT PALLETIZED UNITS WITH TWO CROSSED WEB STRAPS AS SHOWN.
- 3. THE M871 SEMITRAILER IS EQUIPPED WITH THREE DIFFERENT TYPES OF TIEDOWN FITTINGS AS INDICATED IN THE "ISOMETRIC VIEW" ON THIS PAGE. TYPE I IS A REMOVABLE TIEDOWN FITTING THAT HAS ONE RING AND IS POSITIONED BY REACHING UNDER THE FLOOR OF THE TRAILER, INSERTING THE TIEDOWN FITTING UP THROUGH THE HOLE AND ROTATING IN INTO POSITION (NOTE THAT THIS REMOVEABLE TIEDOWN FITTING IS ALSO USED ON THE M872 SEMITRAILER), THERE ARE TEN OF THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M871 SEMITRAILER. TYPE II IS A REMOVEABLE TIEDOWN FITTING THAT HAS TWO RINGS AND IS POSITIONED BY DEPRESSING A SPRING LOCK LEVER AND INSERTING THE TIEDOWN FITTING INTO A 1-3/4" DIAMETER HOLE FROM THE TOP. ASSURE THAT THE TIEDOWN FITTING IS FIRMLY SEATED AND ROTATED SO THE SPRING LOCK LEVER IS POINTING AWAY FROM THE DIRECTION OF PULL ON THE ATTACHED WEB STRAP TIEDOWN ASSEMBLY. THERE ARE TEN OF THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M871 SEMITRAILER. TYPE III IS A FIXED TIEDOWN FITTINGS ON EACH SIDE OF THE M871 SEMITRAILER. IN THE LOADS SHOWN IN THIS DRAWING, NO TYPE I (CONTINUED AT RIGHT)

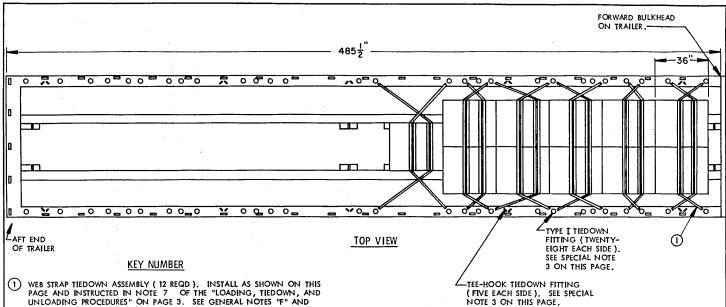
LOAD AS SHOWN

ITEM QUANTITY

WEIGHT (APPROX)

PALLETIZED UNIT----9----- 6.030 LBS

SEMITRAILER, 22-1/2-TON, M871



WEB STRAP TIEDOWN ASSEMBLY (12 REQD). INSTALL AS SHOWN ON THIS PAGE AND INSTRUCTED IN NOTE 7 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

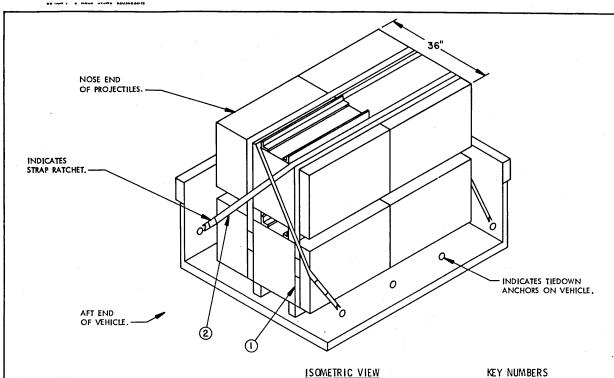
SPECIAL NOTES:

- A TYPICAL LOAD OF ELEVEN PALLETIZED UNITS IS SHOWN ON A SEMI-TRAILER, 34-TON, M872, HAVING DIMENSIONS OF 485-1/2" LONG BY 96" WIDE.
- A PARTIAL LOAD OF ELEVEN PALLETIZED UNITS IS SHOWN. HOWEVER, A MAXIMUM LOAD OF TWENTY-FOUR PALLETIZED UNITS CAN BE LOADED ON THE TRAILER BY POSITIONING THEM TWO ACROSS AND TWELVE LONG IN THE SAME MANNER AS SHOWN ABOVE. SECURE EACH TWO LATERALLY ADJACENT PALLETIZED UNITS WITH TWO CROSSED WEB STRAPS AS SHOWN.
- THE M872 SEMITRAILER IS EQUIPPED WITH TWO DIFFERENT TYPES OF TIEDOWN FITTINGS AS INDICATED IN THE "TOP VIEW" ON THIS PAGE. TYPE I IS A REMOVEABLE TIEDOWN FITTING THAT HAS ONE RING AND IS POSITIONED BY REACHING UNDER THE FLOOR OF THE TRAILER, INSERTING THE TIEDOWN FITTING UP THROUGH THE HOLE AND ROTATING IT INTO POSITION (NOTE FITTING UP THROUGH THE HOLE AND ROTATING IT INTO POSITION (NOTE THAT THIS REMOVEABLE TIEDOWN FITTING MAY ALSO BE USED ON THE M871 SEMITRALLER). THERE ARE TWENTY-EIGHT OF THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M872 SEMITRALLER. HOWEVER, THE QUANTITY AND LOCATION MAY VARY ON SOME M872 SEMITRALLERS, THE SECOND TYPE OF TIEDOWN FITTING IS THE "TEE-HOOK". THIS IS A REMOVEABLE TIEDOWN FITTING EQUIPPED WITH ONE ELONGATED RING AND IS POSITIONED BY INSERTING IT INTO ONE OF THE ELONGATED SLOTTED HOLES WHICH ARE AT A 45° ANGLE TO THE SIDE OF THE TRAILER, THERE ARE FIVE OF THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M872 SEMITRALLER, HOWEVER, HE QUANTITY AND LOCATION MAY VARY ON SOME M872 SEMITRALLERS, ASSURE THAT THE TIEDOWN FITTING IS FIRMLY SEATED AND ROTATED APPROXIMATELY \$5° TO ENGAGED POSITION BEFORE ATTACHING THE WEB STRAP TIEDOWN ASSEMBLY. SEE "TIEDOWN ANCHOR DETAILS" ON PAGE 22.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD ON THE TRAILER. ALSO, SEE THE "ISOMETRIC VIEW" ON PAGE 13 FOR ADDITIONAL GUIDANCE.
- A TOTAL OF TWELVE WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN .

LOAD AS SHOWN

<u>ITEM</u>	QUANTITY	WEIGHT (APPROX
DALLETIZED LINUT.	11	7 370 LRS

SEMITRAILER, 34-TON, M872



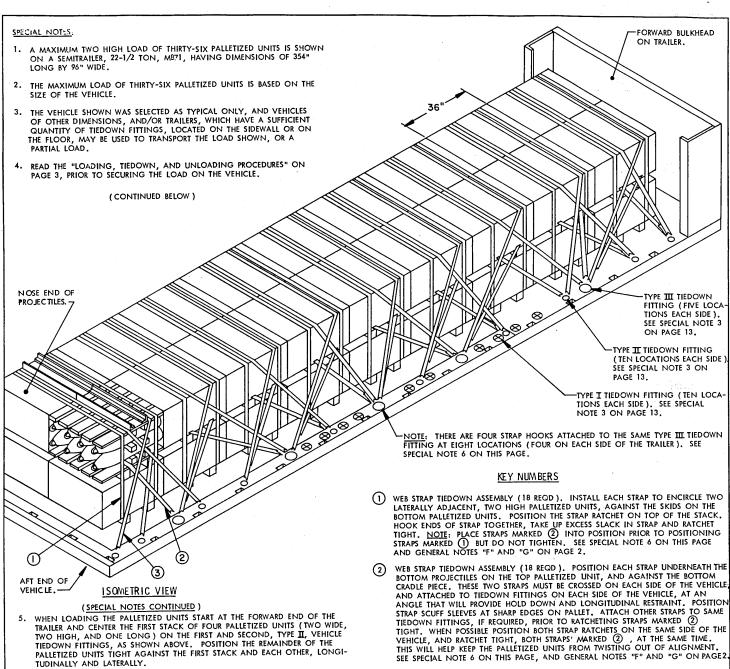
- A MAXIMUM TWO HIGH LOAD OF FOUR PALLETIZED UNITS IS SHOWN IN A TRAILER, AMMUNITION, 1–1/2 TON, M332, HAVING INSIDE DIMENSIONS OF 68-1/2" LONG BY 55-3/8" WIDE.
- THE MAXIMUM LOAD OF FOUR PALLETIZED UNITS IS BASED ON THE OFF HIGHWAY LOAD LIMIT AND/OR SIZE OF THIS VEHICLE.
- THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY AND VEHICLES OF OTHER DIMENSIONS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN ANCHORS, LOCATED ON THE SIDE WALL, END WALL, OR FLOOR, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN THE VEHICLE.
- POSITION THE TWO HIGH PALLETIZED UNITS TIGHT AGAINST EACH OTHER, AND CENTERED LONGITUDINAL BETWEEN THE TWO TIEDOWN ANCHORS ON THE SIDE OF THE VEHICLE TO WHICH STRAPS MARKED ② WILL BE ATTACHED.
- IF DESIRED, ONE WIDE LOADS MAY BE POSITIONED OFF CENTER LATERALLY TO HELP BALANCE THE LOAD.
- A TOTAL OF FOUR WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD

KEY NUMBERS

- WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO ENCIRCLE TWO LONGITUDINALLY ADJACENT, TWO HIGH, PALLETIZED UNITS, AGAINST THE SKIDS ON THE BOTTOM PALLETIZED UNITS. POSITION THE STRAP RATCHET ON TOP OF THE PALLETIZED UNITS. HOOK ENDS OF STRAP TOGETHER, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G"
- WEB STRAP TIEDOWN ASSEMBLY (2 REQD), INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, UP AND OVER TOP OF PALLETIZED UNITS, AGAINST THE STEEL ANGLES AS SHOWN, DOWN TO A TIDEOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE. THESE TWO STRAPS WILL BE CROSSED AT ENDS OF LOAD, POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE, POSITION BOTH STRAP RATCHETS AT SAME END OF LOAD, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT BOTH STRAPS MARKED (2) AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2. "F" AND "G" ON PAGE 2.

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX
		 '
PALLETIZED UNIT	4	2,680 LBS



(SPECIAL NOTES CONTINUED)

- WHEN LOADING THE PALLETIZED UNITS START AT THE FORWARD END OF THE TRAILER AND CENTER THE FIRST STACK OF FOUR PALLETIZED UNITS (TWO WIDE, TWO HIGH, AND ONE LONG) ON THE FIRST AND SECOND, TYPE II, VEHICLE TIEDOWN FITTINGS, AS SHOWN ABOVE. POSITION THE REMAINDER OF THE PALLETIZED UNITS TIGHT AGAINST THE FIRST STACK AND EACH OTHER, LONGI-TUDINALLY AND LATERALLY.
- THIS IS A SPECIAL REQUIREMENT LOAD DUE TO THE LIGHT WEIGHT OF THE PALLETIZED UNIT, AND NECESSITATES ATTACHING FOUR WEE STRAP TIEDOWN ASSEMBLIES TO EACH OF FOUR, TYPE III, VEHICLE TIEDOWN FITTINGS, ON BOTH SIDES OF THE VEHICLE, AS SHOWN IN THE LOAD ABOVE, IN LIEU OF TWO, AS STATED IN GENERAL NOTE "K" ON PAGE 2.
- 7. IF DESIRED, THE PALLETIZED UNITS MAY BE TURNED 90 DEGREES TO INCREASE THE LOAD CAPACITY, AND SECURED AS SHOWN IN THE LOAD ON PAGE 17.
- A TOTAL OF FIFTY-FOUR WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN. SIX WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR EACH STACK OF FOUR PALLETIZED UNITS.

WEB STRAP TIEDOWN ASSEMBLY (18 REQD). POSITION EACH STRAP OVER TOP OF BOTH SECOND LAYER PALLETIZED UNITS, STAYING TO THE OUTSIDE, AND AGAINST THE STEEL ANGLES ON THE COVER ASSEMBLY. THESE TWO STRAPS MUST BE CROSSED AT EACH SIDE OF THE VEHICLE, AND ATTACHED TO TIEDOWN FITTINGS ON EACH SIDE OF THE VEHICLE, AT AN ANGLE THAT WILL PROVIDE HOLD-DOWN AND LONGITUDINAL RESTRAINT. POSITION STRAP SCUFF SLEEVES AT SHARP EDGES ON PALLET AND STEEL ANGLE. ATTACH OTHER STRAPS TO SAME TIEDOWN FITTINGS, IF REQUIRED, PRIOR TO RATCHETION STRAPS MARKED (3) TIGHT. WHEN POSSIBLE, POSITION BOTH STRAP STACHETS ON THE SAME SIDE OF THE VEHICLE AND RATCHET TIGHT, BOTH STRAPS MARKED (3), AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT. SEE SPECIAL NOTE 6 ON THIS PAGE, AND GENERAL NOTES "F" AND "G" ON PAGE 2.

LOAD AS SHOWN

WEIGHT (APPROX) QUANTITY PALLETIZED UNIT ----- 36 ----- 24,120 LBS

SEMITRAILER, 22-1/2 TON, M871

NOSE END OF PRO-JECTILES.

TYPE III. TIEDOWN

TYPE II TIEDOWN FITTING (TEN LOCATIONS EACH SIDE). SEE SPECIAL NOTE 3 ON PAGE 13.

TYPE I TIEDOWN FITTING (TEN LOCATIONS EACH SIDE). SEE SPECIAL NOTE 3 ON PAGE

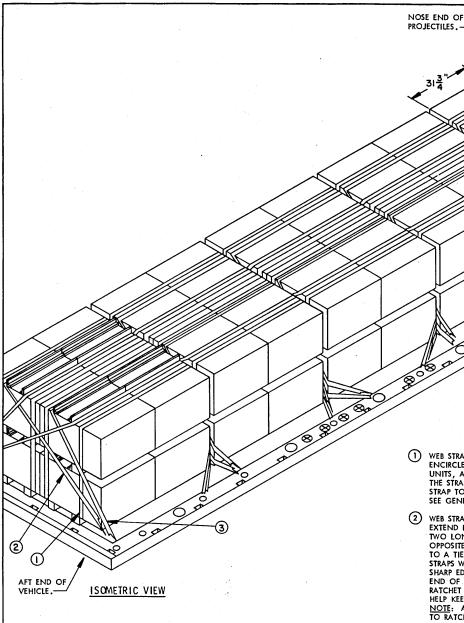
FITTING (FIVE LOCATIONS EACH SIDE).

SEE SPECIAL NOTE 3 ON PAGE 13.

FORWARD BULKHEAD

ON TRAILER.

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SPECIAL NOTES:

- A MAXIMUM TWO HIGH LOAD OF FORTY PALLETIZED UNITS IS SHOWN ON A SEMITRAILER, 22-1/2 TON, M871, HAVING DIMENSIONS OF 354" LONG BY 96" WIDE.
- 2. THE MAXIMUM LOAD OF FORTY PALLETIZED UNITS IS BASED ON THE SIZE OF THE VEHICLE.
- 3. THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY, AND VEHICLES OF OTHER DIMENSIONS, AND/OR TRAILERS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN FITTINGS, LOCATED ON THE SIDEWALL OR ON THE FLOOR, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
- 4. READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD ON THE VEHICLE.
- 5. POSITION THE TWO HIGH PALLETIZED UNITS ON THE VEHICLE IN LOAD UNITS OF EIGHT, WITH A MINIMUM SPACE OF THREE INCHES BETWEEN LOAD UNITS. WHEN POSSIBLE, CENTER EACH EIGHT PALLET LOAD UNIT LONGITUDINALLY BETWEEN THE TWO TIEDOWN ANCHORS ON THE SIDE OF THE VEHICLE TO WHICH THE STRAPS MARKED ② AND ③ WILL BE ATTACHED. ALL PALLETIZED UNITS ARE POSITIONED WITH THE BASE END OF THE PROJECTILES BUTTED TOGETHER AT THE CENTER OF THE VEHICLE WIDTH.
- 6. A TOTAL OF FORTY WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN. EIGHT WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR EACH LOAD UNIT OF EIGHT PALLETIZED UNITS.

KEY NUMBERS

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- WEB STRAP TIEDOWN ASSEMBLY (20 REQD). INSTALL EACH STRAP TO ENCIRCLE TWO LONGITUDINALLY ADJACENT, TWO HIGH, PALLETIZED UNITS, AGAINST THE SKIDS ON THE BOTTOM PALLETIZED UNITS. POSITION THE STRAP RATCHET ON TOP OF THE PALLETIZED UNITS. HOOK ENDS OF STRAP TOGETHER, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- WEB STRAP TIEDOWN ASSEMBLY (10 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF TWO LONGITUDINALLY ADJACENT TWO HIGH PALLETIZED UNITS ON THE OPPOSITE SIDE OF THE VEHICLE, AGAINST THE STEEL ANGLES, AND DOWN TO A TIEDOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE. THESE STRAPS WILL BE CROSSED AS SHOWN. POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE. POSITION RATCHETS AT SAME END OF EIGHT PALLET LOAD UNIT, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT BOTH STRAPS MARKED ②, AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT.

 NOTE: ATTACH STRAPS MARKED ③ TO VEHICLE TIEDOWN ANCHORS PRIOR TO RATCHETING STRAPS MARKED ② TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- WEB STRAP TIEDOWN ASSEMBLY (10 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF TWO LONGITUDINALLY ADJACENT TWO HIGH PALLETIZED UNITS ON THE NEAR SIDE OF THE VEHICLE, AGAINST THE STEEL ANGLES AND DOWN TO A TIEDOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE (SAME TIEDOWN ANCHORS THAT STRAPS MARKED (2) ARE ATTACHED TO) POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE. POSITION RATCHETS AT SAME END OF AN EIGHT PALLET LOAD UNIT, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT BOTH STRAPS MARKED (3) AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT. SEE GENERAL NOTES "F" AND "G" ON

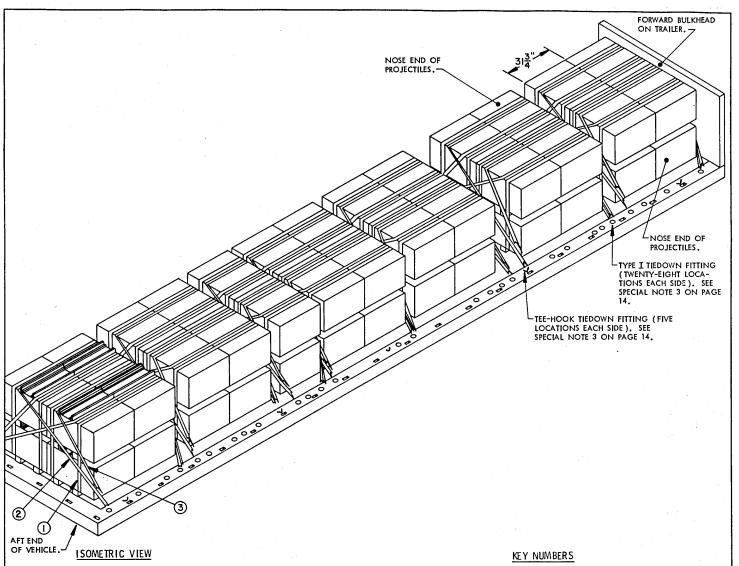
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ITEM QUANTITY

WEIGHT (APPROX)

PALLETIZED UNITS ----- 40 ----- 26,800 LBS

SEMITRAILER, 22-1/2 TON, M871



- A MAXIMUM TWO HIGH LOAD OF FIFTY-TWO PALLETIZED UNITS IS SHOWN ON A SEMITRAILER, 34-TON, M872, HAVING DIMENSIONS OF 485-1/2" LONG BY 96" WIDE.
- THE MAXIMUM LOAD OF FIFTY-TWO PALLETIZED UNITS IS BASED ON THE SIZE OF THE VEHICLE.
- THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY, AND VEHICLES OF OTHER DIMENSIONS, AND/OR TRAILERS, WHICH HAVE A SUFFICIENT QUAN-TITY OF TIEDOWN FITTINGS, LOCATED ON THE SIDEWALL OR ON THE FLOOR, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3, PRIOR TO SECURING THE LOAD ON THE VEHICLE.
- 5. POSITION THE PALLETIZED UNITS ON THE VEHICLE IN LOAD UNITS OF EIGHT, WITH A MINIMUM SPACE OF THREE INCHES BETWEEN LOAD UNITS. WHEN POSSIBLE, CENTER EACH EIGHT PALLET LOAD UNIT LONGITUDINALLY BETWEEN THE TWO TIEDOWN ANCHORS ON THE SIDE OF THE VEHICLE TO WHICH THE STRAPS MARKED ② AND ③ WILL BE ATTACHED. ALL PALLETIZED UNITS ARE POSITIONED WITH THE BASE END OF THE PROJECTILES BUTTED TOGETHER AT THE CENTER OF THE VEHICLE WIDTH. NOTE: A MAXIMUM LOAD OF FIFTY-TWO PALLETIZED UNITS WILL CONSIST OF SIX LOAD UNITS OF EIGHT PALLETS AND ONE LOAD UNIT OF FOUR PALLETS AS SHOWN.
- 6. IF THE PALLETIZED UNITS ARE TURNED 90 O AND LOADED AS SHOWN IN THE LOAD ON PAGE 16, A TOTAL OF FORTY-EIGHT PALLETIZED UNITS CAN BE LOADED ON THE M872 SEMITRAILER. A TOTAL OF SEVENTY-TWO WEB STRAP TIEDOWN ASSEMBLIES WILL BE REQUIRED TO SECURE THE LOAD.
- 7. A TOTAL OF FIFTY-SIX WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN. EIGHT WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR EACH LOAD UNIT OF EIGHT AND/OR FOUR PALLETIZED UNITS.

- WEB STRAP TIEDOWN ASSEMBLY (28 REQD.). INSTALL EACH STRAP TO ENCIRCLE TWO LONGITUDINALLY ADJACENT TWO HIGH PALLETIZED UNITS, AND/OR SINGLE STACK OF TWO HIGH PALLETIZED UNITS, AGAINST THE SKIDS ON THE BOTTOM PALLETIZED UNIT (S.). POSITION THE STRAP RATCHET ON TOP OF THE PALLETIZED UNITS, HOOK ENDS OF STRAP TOGETHER, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- WEB STRAP TIEDOWN ASSEMBLY (14 REQD). INSTALL FACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF TWO LONGITUD-INALLY ADJACENT TWO HIGH PALLETIZED UNITS, AND/OR SINGLE STACK OF TWO HIGH PALLETIZED UNITS, AND/OR SINGLE STACK OF TWO HIGH PALLETIZED UNITS, ON THE OPPOSITE SIDE OF THE VEHICLE, AGAINST THE STEEL ANGLES AND DOWN TO A TIEDOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE. THESE STRAPS WILL BE CROSSED AS SHOWN. POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE, POSITION RATCHETS AT SAME END OF AN EIGHT AND/OR FOUR PALLET LOAD UNIT, TAKE PEXCESS SLACK IN STRAP AND RATCHET TIGHT BOTH STRAPS MARKED ②, ON AN EIGHT AND/OR FOUR PALLET LOAD UNIT, AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT. NOTE: ATTACH STRAPS MARKED ③ TO VEHICLE TIEDOWN ANCHORS PRIOR TO RATCHETING STRAPS MARKED ② TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- WEB STRAP TIEDOWN ASSEMBLY (14 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF TWO LONGITUDINALLY ADJACENT TWO HIGH PALLETIZED UNITS, AND/OR SINGLE STACK OF TWO HIGH PALLETIZED UNITS, AS SHOWN, AGAINST THE STEEL ANGLES AND DOWN TO A TIEDOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE (SAME TIEDOWN ANCHORS THAT STRAPS MARKED ② ARE ATTACHED TO) POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE. POSITION RATCHETS AT SAME END OF AN EIGHT AND/OR FOUR PALLET LOAD UNIT, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT BOTH STRAPS MARKED ③ ON AN EIGHT AND/OR FOUR PALLET LOAD UNIT, AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

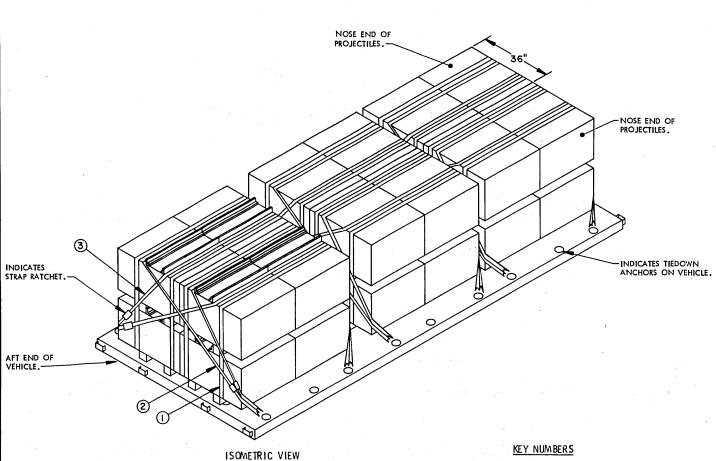
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 ITEM
 QUANTITY
 WEIGHT (APPROX.)

 PALLETIZED UNITS
 ----- 52
 ----- 34,840 LBS

PAGE 18

SEMITRAILER, 34-TON M872



- A MAXIMUM TWO HIGH LOAD OF TWENTY-FOUR PALLETIZED UNITS IS SHOWN IN/ON A TRUCK, HEAVY EXPANDED MOBILITY, 10-TON, M977 AND/OR M935. HAVING INSIDE DIMENSIONS OF 216-3/8" LONG BY 90-3/4" WIDE.
- THE MAXIMUM LOAD OF TWENTY-FOUR PALLETIZED UNITS IS BASED ON THE
- THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY AND VEHICLES OF OTHER DIMENSIONS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN ANCHORS, LOCATED ON THE SIDE WALL, END WALL, OR FLOOR, MAY BE USED TO TRANS-PORT THE LOAD SHOWN, OR A PARTIAL LOAD.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3 PRIOR TO SECURING THE LOAD IN THE VEHICLE.
- POSITION THE TWO HIGH PALLETIZED UNITS ON THE VEHICLE IN LOAD UNITS POSITION THE TWO HIGH PALLETIZED UNITS ON THE VEHICLE IN LOAD UNITS OF EIGHT, WITH A MINIMUM SPACE OF THREE INCHES BETWEEN LOAD UNITS, WHEN POSSIBLE, CENTER EACH EIGHT PALLET LOAD UNIT LONGITUDINALLY BETWEEN THE TWO TIEDOWN ANCHORS ON THE SIDE OF THE VEHICLE TO WHICH THE STRAPS MARKED ② AND ③ WILL BE ATTACHED, ALL PALLETIZED UNITS ARE POSITIONED WITH THE BASE END OF THE PROJECTILES BUTTED TOGETHER AT THE CENTER OF THE VEHICLE WIDTH.
- A TOTAL OF TWENTY-FOUR WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.

KEY NUMBERS

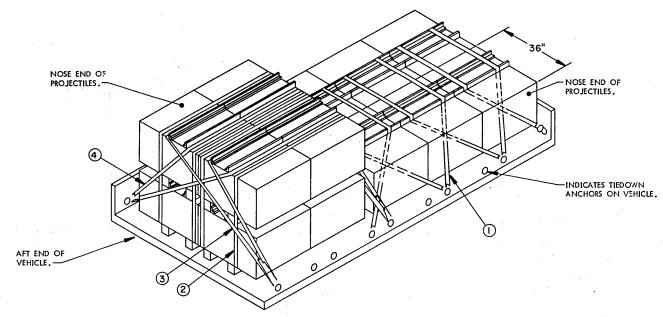
- WEB STRAP TIEDOWN ASSEMBLY (12 REQD). INSTALL EACH STRAP TO ENCIRCLE TWO LONGITUDINALLY ADJACENT TWO HIGH, PALLETIZED UNITS, AGAINST THE SKIDS ON THE BOTTOM PALLETIZED UNITS. POSITION THE STRAP RATCHET ON TOP OF THE PALLETIZED UNITS. HOOK ENDS OF STRAP TOGETHER, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- WEB STRAP TIEDOWN ASSEMBLY (6 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF TWO LONGITUDINALLY ADJACENT TWO HIGH PALLETIZED UNITS ON THE OPPOSITE SIDE OF THE VEHICLE, AGAINST THE STEEL ANGLES, AND DOWN TO A TIEDOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE. THESE STRAPS WILL BE CROSSED AS SHOWN. POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE. POSITION RATCHETS AT SAME END OF AN EIGHT PALLET LOAD UNIT, TAKE UP EXCESS SLACK IN STRAP AND RATCHET INFO BOTH STRAPS MARKED (2), AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT. NOTE. ATTACH STRAPS MARKED (3) TO VEHICLE TIEDOWN ANCHORS PRIOR TO RATCHETING STRAPS MARKED (2) TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2. NOTES "F" AND "G" ON PAGE 2.
- WEB STRAP TIEDOWN ASSEMBLY (6 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF TWO LONGITUDINALLY ADJACENT TWO HIGH PALLETIZED UNITS ON THE NEAR SIDE OF THE VEHICLE, AGAINST THE STEEL ANGLES AND DOWN TO A TIEDOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE (SAME TIEDOWN ANCHORS THAT STRAPS MARKED (2) ARE ATTACHED TO). POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE. POSITION RATCHETS AT SAME END OF AN EIGHT PALLET LOAD UNIT, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT BOTH STRAPS MARKED

 3 AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS
 FROM TWISTING OUT OF ALIGNMENT. SEE GENERAL NOTES "F" AND "G"

LOAD AS SHOWN

ITEM QUANTITY WEIGHT (APPROX) PALLETIZED UNITS ----- 24 ----- 16.080 LBS

ON PAGE 2.



ISOMETRIC VIEW

SPECIAL NOTES:

- A MAXIMUM LOAD OF FOURTEEN PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO, 5-TON, M54, HAVING INSIDE DIMENSIONS OF 168" LONG 89 88" WIDE.
- THE MAXIMUM LOAD OF FOURTEEN PALLETIZED UNITS IS BASED ON THE OFF-HIGHWAY WEIGHT LIMIT OF THE VEHICLE.
- 3. THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY, AND VEHICLES OF OTHER DIMENSIONS, AND/OR TRAILERS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN FITTINGS, LOCATED ON THE SIDEWALL OR ON THE FLOOR, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
- 4. READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3. PRIOR TO SECURING THE LOAD ON THE VEHICLE.
- 5. WHEN POSSIBLE, CENTER THE TWO HIGH EIGHT PALLET LOAD UNIT LONGITUDINALLY BETWEEN THE TWO TIEDOWN ANCHORS ON THE SIDE OF THE VEHICLE TO WHICH THE STRAPS MARKED ③ AND ④ WILL BE ATTACHED. ALL PALLETIZED UNITS ARE POSITIONED WITH THE BASE END OF THE PROJECTILES BUTTED TOGETHER AT THE CENTER OF THE VEHICLE WIDTH.
- 6. A TOTAL OF FOURTEEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN. EIGHT WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE TWO HIGH LOAD UNIT OF EIGHT PALLETS.

KEY NUMBERS

- WEB STRAP TIEDOWN ASSEMBLY (6 REQD.). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE OVER TOP OF PALLETIZED UNITS, AS INSTRUCTED IN NOTE 8 OF THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE 3, TO A TIEDOWN ANCHOR ON OPPOSITE SIDE OF VEHICLE. TAKE UP SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- WEB STRAP TIEDOWN ASSEMBLY (4 REQD). INSTALL EACH STRAP TO ENCIRCLE TWO LONGITUDINALLY ADJACENT, TWO HIGH PALLETIZED UNITS, AGAINST THE SKIDS ON THE BOTTOM PALLETIZED UNITS. POSITION THE STRAP RATCHET ON TOP OF THE PALLETIZED UNITS. HOOK ENDS OF STRAP TOGETHER, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- (3) WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF TWO LONGTIDINALLY ADJACENT TWO HIGH PALLETIZED UNITS ON THE OPPOSITE SIDE OF THE VEHICLE AGAINST THE STEEL ANGLES, AND DOWN TO A TIEDOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE. THESE STRAPS WILL BE CROSSED AS SHOWN, POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE. POSITION RATCHETS AT SAME END OF AN EIGHT PALLET LOAD UNIT, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT BOTH STRAPS MARKED (3). AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT. NOTE: ATTACH STRAPS MARKED (4) TO VEHICLE TIEDOWN ANCHORS PRIOR TO RATCHETING STRAPS MARKED (3) TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF TWO LONGITUDINALLY ADJACENT TWO HIGH PALLETIZED UNITS ON THE NEAR SIDE OF THE VEHICLE, AGAINST THE STEEL ANGLES AND DOWN TO A TIEDOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE (SAME TIEDOWN ANCHORS THAT STRAPS MARKED (3) ARE ATTACHED TO). POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE. POSITION RATCHETS AT SAME END OF AN EIGHT PALLET LOAD UNIT, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT BOTH STRAPS MARKED (4), AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

LOAD AS SHOWN

ITEM		QUAI	NTII	<u>r</u>	WEIGH	(APPROX)
PALLETIZED	UNIT		14		9,380	LBS

PAGE 20

TRUCK, CARGO, 5-TON, M54

ISOMETRIC VIEW

SPECIAL NOTES:

- A MAXIMUM TWO HIGH LOAD OF TWELVE PALLETIZED UNITS IS SHOWN IN A TRUCK, DUMP, 5-TON, M51, HAVING INSIDE DIMENSIONS OF 125" LONG BY 82" WIDE.
- THE MAXIMUM LOAD OF TWELVE PALLETIZED UNITS IS BASED ON THE SIZE OF THE VEHICLE.
- THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY, AND VEHICLES OF OTHER DIMENSIONS, AND/OR TRAILERS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN FITTINGS, LOCATED ON THE SIDEWALL OR ON THE FLOOR, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
- READ THE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" ON PAGE
 PRIOR TO SECURING THE LOAD ON THE VEHICLE.
- 5. POSITION THE TWO HIGH PALLETIZED UNITS ON THE VEHICLE IN LOAD UNITS OF EIGHT AND/OR FOUR, WITH A MINIMUM SPACE OF THREE INCHES SETWEEN LOAD UNITS. WHEN POSSIBLE, CENTER THE PALLET LOAD UNIT LONGITUDINALLY BETWEEN THE TWO TIEDOWN ANCHORS ON THE SIDE OF THE VEHICLE TO WHICH THE STRAPS MARKED (2) AND (3) WILL BE ATTACHED. ALL PALLETIZED UNITS ARE POSITIONED WITH THE BASE END OF THE PROJECTILES BUTTED TOGETHER AT THE CENTER OF THE VEHICLE WIDTH.
- 6. A TOTAL OF SIXTEEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN. EIGHT WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR EACH LOAD UNIT OF EIGHT AND/OR FOUR PALLETIZED UNITS.

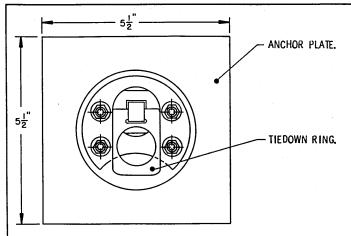
KEY NUMBERS

- WEB STRAP TIEDOWN ASSEMBLY (8 REQD). INSTALL EACH STRAP TO ENCIRCLE A STACK OF TWO HIGH PALLETIZED UNITS, AGAINST THE SKIDS ON THE BOTTOM PALLETIZED UNITS. POSITION THE STRAP RATCHET ON TOP OF THE PALLETIZED UNITS. HOOK ENDS OF STRAP TOGETHER, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- (2) WEB STRAP TIEDOWN ASSEMBLY (4 REOD), INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF A STACK OF TWO HIGH PALLETIZED UNITS ON THE OPPOSITE SIDE OF THE VEHICLE, AGAINST THE STEEL ANGLES, AND DOWN TO A TIEDOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE. THESE STRAPS WILL BE CROSSED AS SHOWN. POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE. POSITION RATCHETS AT SAME END OF PALLET LOAD UNIT, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT B OTH STRAPS MARKED (2), AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT. NOTE: ATTACH STRAPS MARKED (3) TO VEHICLE TIEDOWN ANCHORS PRIOR TO RATCHETING STRAPS MARKED (2) TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- WEB STRAP TIEDOWN ASSEMBLY (4 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF A STACK OF TWO HIGH PALLETIZED UNITS ON THE NEAR SIDE OF THE VEHICLE, AGAINST THE STEEL ANGLES AND DOWN TO A TIEDOWN ANCHOR ON THE SAME SIDE OF THE VEHICLE (SAME TIEDOWN ANCHORS THAT STRAPS MARKED (2) ARE ATTACHED TO). POSITION STRAP SCUFF SLEEVES AT SHARP EDGES OF PALLET AND STEEL ANGLE. POSITION RATCHETS AT SAME END OF PALLET LOAD UNIT, TAKE UP EXCESS SLACK IN STRAP AND RATCHET TIGHT BOTH STRAPS MARKED (3) AT THE SAME TIME. THIS WILL HELP KEEP THE PALLETIZED UNITS FROM TWISTING OUT OF ALIGNMENT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

LOAD AS SHOWN

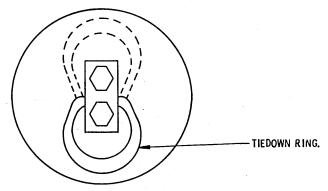
ITEM	_	QUANTITY V	LEIGHT / ADDDOV
IIEM		GOANITT	VEIGHT (APPROX
PALLE.	TIZED LINIT	12	8.040 1RS

TRUCK, DUMP, 5-TON, M51



UNIVERSAL TIEDOWN ANCHOR (FRONT VIEW)

THIS TIEDOWN ANCHOR IS RATED AT 5,000 POUNDS AND IS FOR USE ON CARGO TRUCKS AND/OR CARGO TRAILERS. SEE GENERAL NOTE "D'ON PAGE 2 AND "NOTE ● " AT RIGHT.



TYPE III, FIXED TIEDOWN ANCHOR (TOP VIEW)

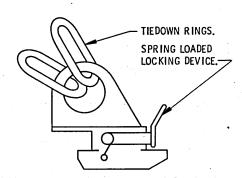
THIS TIEDOWN ANCHOR IS RATED AT 10,000 POUNDS AND IS ONLY INSTALLED ON THE M871 SEMITRAILER. THERE ARE FIVE ON EACH SIDE OF THE M871 SEMITRAILER AND THEY DO NOT SWIVEL. SEE GENERAL NOTE "D"ON PAGE 2



IF THE TACTICAL VEHICLES BEING USED ARE NOT EQUIPPED WITH THE 5,000 POUND UNIVERSAL TIEDOWN ANCHOR SHOWN AT LEFT, SEE TB 9-2300-280-30 FOR VEHICLE MODIFICATION PROCEDURES AND INSTALLATION OF THE TIEDOWN ANCHOR. WITH THE EXCEPTION OF THE HEAVY EXPANDED MOBILITY TACTICAL TRUCK (HEMTT), M977 AND/OR M985, WHICH HAS THE TIEDOWN ANCHORS INSTALLED IN THE FLOOR, THESE TIEDOWN ANCHORS ARE TO BE INSTALLED IN THE SIDE WALLS AND END WALLS OF CARGO TRUCKS AND CARGO TRAILERS. IF AN M127, 12-TON SEMITRAILER IS BEING USED, SEE INFORMATION IN TB 9-2300-280-30. THE M127 SEMITRAILER REQUIRES A DIFFERENT TYPE OF TIEDOWN ANCHOR.

NOTE ⊕:

THIS TIEDOWN IS RATED AT 10,000 POUNDS AND IS ONLY FOR USE ON THE M871 SEMITRAILER. IT IS COMMONLY REFERRED TO AS "BIG FOOT". THERE ARE LOCATIONS FOR TEN TIEDOWN ANCHORS ON EACH SIDE OF THE M871 SEMITRAILER AND THEY SWIVEL. THIS TIEDOWN ANCHOR HAS A SPRING LOADED LOCKING DEVICE TO HOLD IT IN PLACE AND IT IS INSERTED, FROM THE TOP, INTO A 1-3/4" DIAMETER HOLE LOCATED ON THE SIDE OF THE SEMITRAILER FLOOR. SEE GENERAL NOTE "D"ON PAGE. 2. THIS TIEDOWN IS FURTHER IDENTIFIED AS NSN 2540-01-117-3043.



ELONGATED SLOTTED

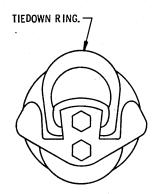
HOLES IN FLOOR OF SEMITRAILER FOR

TYPE II, REMOVABLE TIEDOWN ANCHOR (SIDE VIEW)

(SEE "NOTE ⊕ " ABOVE.)

TIEDOWN RING.-

TEE-HOOK TIEDOWN ANCHOR.



NOTE A:

THIS TIEDOWN ANCHOR IS RATED AT 5,000 POUNDS AND IS ONLY INSTALLED ON THE M872 SEMITRAILER. THERE ARE LOCATIONS FOR FIVE TIEDOWN ANCHORS ON EACH SIDE OF THE M872 SEMITRAILER. THIS TIEDOWN ANCHOR IS POSITIONED BY INSERTING IT, FROM THE TOP, INTO ONE OF THE ELONGATED SLOTTED HOLES LOCATED ON THE SIDE OF THE SEMITRAILER FLOOR. SEE GENERAL NOTE "D"ON PAGE 2 THIS TIEDOWN ANCHOR IS FURTHER IDENTIFIED AS NSN 2540-01-113-9285.

TYPE I, REMOVABLE TIEDOWN ANCHOR (TOP VIEW)

THIS TIEDOWN ANCHOR IS RATED AT 10,000 POUNDS AND IS INSTALLED ON THE M871 AND M872 SEMITRAILERS. IT IS COMMONLY REFERRED TO AS 'MICKEY MOUSE'. THERE ARE LOCATIONS FOR TEN TIEDOWN ANCHORS ON EACH SIDE OF THE M871 SEMITRAILER AND LOCATIONS FOR APPROXIMATELY TWENTY-EIGHT TIEDOWN ANCHORS ON EACH SIDE OF THE M872 SEMITRAILER. THIS TIEDOWN ANCHOR IS POSITIONED BY REACHING UNDER THE FLOOR OF THE SEMITRAILER AND INSERTING THE TIEDOWN ANCHOR UP THROUGH THE HOLE AND ROTATING IT INTO POSITION. SEE GENERAL NOTE "D"ON PAGE 2 THIS TIEDOWN ANCHOR IS FURTHER IDENTIFIED AS NSN 2540-01-112-1732.

TED AT 5,000 POUNDS
HE M872 SEMITRAILER.
VE TIEDOWN ANCHORS
EMITRAILER.
THIS
NED BY INSERTING IT,
THE ELONGATED SLOTTED
OF THE SEMITRAILER
TON PAGE 2
RITHER IDENTIFIED

HOLES IN SEMITRAILER
I (MICKEY MOUSE)
TIEDOWN ANCHOR.

SEMITRAILER FLOOR.

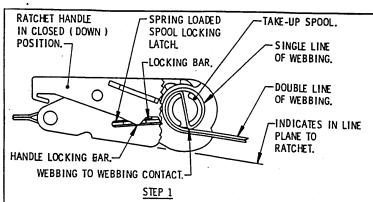
REMOVABLE TEE-HOOK TIEDOWN ANCHOR (ISOMETRIC VIEW)

(SEE "NOTE ▲" ABOVE)

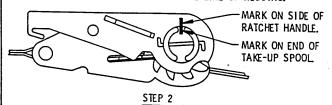
TIEDOWN ANCHOR DETAILS

PAGE 22

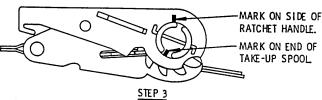
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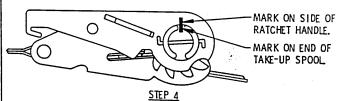
IN THIS VIEW PART OF THE RATCHET HOUSING IS SHOWN BROKEN AWAY TO DEPICT WEBBING-TO-WEBBING CONTACT ON THE TAKE-UP SPOOL OF THE RATCHET. WEBBING-TO-WEBBING CONTACT IS ACHIEVED WHEN THE OPERATOR HOLDS THE DOUBLE LINE OF WEBBING IN AN "IN LINE PLANE TO THE RATCHET" AND IT MAKES CONTACT WITH THE SINGLE LINE OF WEBBING.



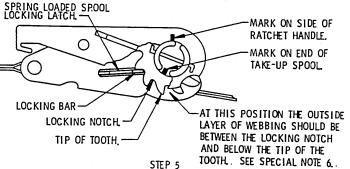
THIS VIEW DEPICTS THE LOCATION OF THE FIXED MARK ON THE RATCHETING HANDLE, WITH ANOTHER MATCHING MARK ON THE END OF THE JAKE-UP SPOOL, AFTER WEBBING-TO-WEBBING CONTACT HAS BEEN MADE.



THIS VIEW DEPICTS THE LOCATION OF THE MARK ON THE END OF THE TAKE-UP SPOOL AFTER THE SPOOL HAS BEEN ROTATED ONE-HALF TURN, AFTER WEBBING-TO-WEBBING CONTACT HAS BEEN MADE.



THIS VIEW DEPICTS THE LOCATION OF THE MARK ON THE END OF THE TAKE-UP SPOOL AFTER THE SPOOL HAS BEEN ROTATED ONE FULL TURN, AFTER WEBBING-TO-WEBBING CONTACT HAS BEEN MADE.



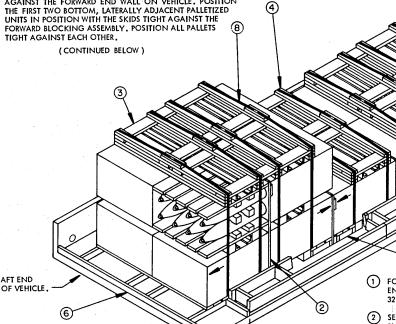
THIS VIEW DEPICTS THE LOCATION OF THE MARK ON THE END OF THE TAKE-UP SPOOL AFTER THE SPOOL HAS BEEN ROTATED ONE AND ONE-HALF TURNS, AFTER WEBBING-TO-WEBBING CONTACT HAS BEEN MADE. ALSO IN THIS VIEW, PART OF THE RATCHET HANDLE IS SHOWN BROKEN AWAY TO SHOW THE LOCKING BAR FULLY SEATED IN THE MATCHING LOCKING NOTCH (SPROCKET GEAR TEETH).

SPECIAL NOTES:

- THE PURPOSE OF THE RATCHET DETAILS ON THIS PAGE, AND OF THESE NOTES, IS TO AUGMENT THE GUIDANCE SET FORTH WITHIN GENERAL NOTE "F" ON PAGE 2.
- 2. THE REQUIREMENT FOR 1/2 BUT NOT MORE THAN 1-1/2 WRAPS OF STRAP ON THE TAKE-UP SPOOL OF THE TENSIONING RATCHET, AS SPECIFIED WITHIN GENERAL NOTE "F" ON PAGE 2, ACTUALLY MEANS 1/2 TO 1-1/2 WRAPS OF DOUBLED WEBBING, THE 1/2 TO 1-1/2 WRAPS REQUIRE THAT THE SPOOL MECHANISM BE ROTATED 1/2 TO 1-1/2 TURNS. ALSO, THE 1/2 TO 1-1/2 WRAPS (TURNS) ARE TO BE ACCOMPLISHED ONLY AFTER ENOUGH WEBBING HAS BEEN WOUND ONTO THE SPOOL TO ACHIEVE A WEBBING TO WEBBING CONFIGURATION, AS SHOWN IN THE "STEP 1" DETAIL ON THIS PAGE.
- 3. ONE METHOD THAT CAN BE USED TO ENSURE THAT THE 1/2 TO 1-1/2 WRAPS ARE WOUND ONTO THE TAKE-UP SPOOL, AFTER WEBBING TO WEBBING CONTACT HAS BEEN MADE, IS TO PLACE A FIXED MARK (PAINT OR SIMILAR MATERIAL) ON THE SIDE OF THE RATCHETING HANDLE, WITH THE HANDLE IN ITS CLOSED (DOWN) POSITION, AND ANOTHER SHORT MATCHING MARK ON THE END OF THE SPOOL, AS SHOWN IN THE "STEP 2" DETAIL ON THIS PAGE. AS THE SPOOL IS ROTATED TO TENSION A TIEDOWN STRAP ASSEMBLY, THE NUMBER OF WRAPS (TURNS) CAN BE DETERMINED VISUALLY BY COMPARING THE "MARK" LOCATION ON THE SPOOL TO THE "MARK" LOCATION ON THE RATCHETING HANDLE WITH THE HANDLE IN CLOSED POSITION. SEE THE "STEP 3", "STEP 4", AND "STEP 5" DETAILS ON THIS PAGE.
- 4. ANOTHER METHOD THAT CAN BE USED TO ENSURE THAT THE 1/2 TO 1-1/2 WRAPS ARE ACHIEVED, AFTER WEBBING TO WEBBING CONTACT HAS BEEN MADE, IS TO COUNT THE AUDIBLE CLICKS MADE BY THE RATCHET ASSEMBLY AS A WEB STRAP ASSEMBLY IS BEING TENSIONED. THE RATCHET ASSEMBLY ON MOST WEB STRAP ASSEMBLIES HAVE 11 TEETH ON THE GEARLIKE DEVICE ON EACH END OF THE TAKE-UP SPOOL; SOME OTHER STRAP ASSEMBLIES HAVE ONLY 9 TEETH. THEREFORE, AFTER INITIAL WEBBING TO WEBBING CONTACT HAS BEEN MADE, ROTATE (TURN) THE SPOOL THROUGH A MINIMUM OF 6 TO A MAXIMUM OF 17 CLICKS (1/2 TO 1-1/2 WRAPS) WHEN THE GEAR HAS 11 TEETH, AND ROTATE (TURN) THE SPOOL THROUGH A MINIMUM OF 5 TO A MAXIMUM OF 14 CLICKS (1/2 TO 1-1/2 WRAPS) IF THE GEAR HAS 9 TEETH.
- 5. AFTER A STRAP ASSEMBLY HAS BEEN PROPERLY TENSIONED, CARE MUST BE EXERCISED TO ASSURE THAT THE TAKE-UP SPOOL LOCKING LATCH (SPRING LOADED DEVICE WITH A LOCKING BAR ON EACH SIDE OF THE RATCHET ASSEMBLY) IS FULLY SEATED ON BOTH SIDES IN MATCHING LOCKING NOTCHES, WHICH ARE SIMILAR TO SPROCKET GEAR TEETH, THAT ARE LOCATED ON EACH END OF THE TAKE-UP SPOOL SEE "STEP 5" DETAIL ON THIS PAGE. THE LOCKING LATCH IS "FULLY SEATED" WHEN THE HANDLE WILL CLOSE AND THE LOCKING EAR OR SIMILAR DEVICE ON THE HANDLE, PREVENTS THE ACCIDENTAL WITHDRAWAL OF THE LOCKING LATCH. SEE "STEP 1" DETAIL ON THIS PAGE. IF THE FULLY SEATED CONDITION CANNOT BE ACHIEVED, THE STRAP MUST BE RELEASED AND HAND RETENSIONED AS TIGHT AS POSSIBLE TO ACHIEVE THE FULLY SEATED CONDITION.
- 6. ANOTHER VISUAL METHOD OF DETERMINING WHEN THERE IS 1/2 TO 1-1/2 WRAPS OF WEBBING ON THE TAKE-UP SPOOL, AFTER INITIAL WEBBING-TO-WEBBING CONTACT HAS BEEN MADE, IS TO LOOK AT THE SPOOL. WHEN A TIEDOWN IS COMPLETE, THE STRAP WEBBING ON THE SPOOL OF THE RATCHET SHOULD BE ABOVE THE LOWER CURVE OF THE LOCKING NOTCH, AND SHOULD BE BELOW THE TIPS OF THE TEETH OF THE RATCHET AS IDENTIFIED IN "STEP 5" ON THIS PAGE. IT SHOULD BE NOTED THAT ANY PROCEDURES THAT ENSURE PROPER TENSIONING ARE ACCEPTABLE AND METHODS ON THE DRAWING ONLY PROVIDE SOME METHODS.

AFT END

- 1. A MAXIMUM LOAD OF FOURTEEN PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO, 5-TON, M55, HAVING INSIDE DIMENSIONS OF 244" LONG BY 88" WIDE. THE MAXIMUM LOAD IS BASED ON THE OFF-HIGHWAY LOAD WEIGHT LIMIT FOR THIS VEHICLE.
- 2. THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY AND VEHICLES OF OTHER DIMENSIONS AND/OR TRAILERS HAVING STRONG SIDE WALLS AND END WALLS, MAY BE
- 3. PRIOR TO LOADING PALLETS, FABRICATE THE FORWARD BLOCKING ASSEMBLY A, MARKED ①, AND POSITION AGAINST THE FORWARD END WALL ON VEHICLE. POSITION THE FIRST TWO BOTTOM, LATERALLY ADJACENT PALLETIZED UNITS IN POSITION WITH THE SKIDS TIGHT AGAINST THE



24" MIN

ISOMETRIC VIEW

4. AFTER ALL PALLETIZED UNITS ARE LOADED, FABRICATE THE REAR BLOCKING ASSEMBLY A, MARKED (6), AND SLIDE IT INTO POSITION UNDER THE PALLET OVERHANG AND TIGHT AGAINST THE PALLET SKIDS. RAISE AND SECURE THE VEHICLE TAILGATE.

(SPECIAL NOTES CONTINUED)

- 5. PALLETS AT FORWARD AND REAR END OF LOAD MUST ALWAYS BE POSITIONED WITH NOSE END POINTING TOWARD END WALL, AS SHOWN.
- 6. PALLETS WHICH REQUIRE STRAPPING ASSEMBLY A MUST ALWAYS BE POSITIONED WITH THE BASE END OF PROJEC-TILES BUTTED TOGETHER, AS SHOWN.
- 7. STRAPPING ASSEMBLY B MUST NEVER BE USED ON PALLETS WHICH ARE POSITIONED AT REAR OR FORWARD END OF
- 8. IF LOADING LESS PALLETIZED UNITS THAN SHOWN USE THESE SAME PROCEDURES. DO NOT STACK PALLETS UNLESS NECES-SARY FOR MAXIMUM LOAD.
- 9. ALL PALLETS MUST BE POSITIONED WITH NOSE END POINT-ING FORWARD AND/OR AFT.

LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	178	89
2" X 4"	324	216
2" X 6"	104	104
NAILS	NO. REQD	POUNDS
6d (2")	360	2-1/4
10d (3")	508	8

1 FORWARD/REAR BLOCKING ASSEMBLY A (1 REQD). POSITION AGAINST FORWARD END WALL OF VEHICLE, SEE SPECIAL NOTE 3 ON THIS PAGE AND DETAIL ON PAGE

24" MIN

INDICATES NOSE END OF PROJECTILES.

(9)

INDICATES TIEDOWN ANCHORS ON VEHICLE.

- SEPARATOR GATE A (4 REQD) (ONE 63" LONG BY 50" HIGH AND THREE 63" LONG BY 25" HIGH). POSITION BETWEEN PALLETIZED UNITS. SEE DETAIL ON PAGE 34.
- (3) STRAPPING ASSEMBLY A (2 REQD), POSITION ON TOP OF THE TWO HIGH AND/OR ONE HIGH, PALLETIZED UNITS AS SHOWN, SEE THE DETAIL ON PAGE 33.
- STRAPPING ASSEMBLY B (1 REQD), POSITION ON TOP OF THE ONE HIGH, TWO PALLET STACK, SEE DETAIL ON PAGE 33.
- ANTI-TIP ASSEMBLY (3 REQD), POSITION UNDER NOSE END OF BOTTOM LAYER PALLETS AT ALL LOCATIONS EXCEPT WHERE USING A FORWARD/REAR BLOCKING ASSEMBLY. SEE DETAIL ON PAGE 35.
- 6 FORWARD/REAR BLOCKING ASSEMBLY A (1 REQD.). FABRICATE TO FIT BETWEEN REAR END WALL ON VEHICLE AND SKIDS ON REAR PALLETS. SEE DETAIL ON
- SIDE BLOCKING ASSEMBLY A (AS REQUIRED TO RETAIN ALL PALLETS). POSITION BETWEEN PALLETS AND SIDE WALL OF VEHICLE, TO EXTEND FROM HEADER ON REAR BLOCKING ASSEMBLY TO HEADER ON FORWARD BLOCKING ASSEMBLY, SEE DETAIL ON PAGE 35.
- UNITIZING STRAP, 1-1/4" X .035" OR .031" BY LENGTH-TO-SUIT STEEL UNITIZING STRAPPING (10 REQD), POSITION IN VERTICAL ALIGNMENT AND ENCIRCLE FOUR AND/OR TWO PALLETIZED UNITS AT LOCATIONS SHOWN, SECURE IN PLACE ON EACH SIDE OF LOAD BY DRIVING 10d MAILS TO STRAPPING ASSEMBLY ON EACH SIDE OF STRAP AND BENDING OVER STRAP. STAPLES MAY BE USED IF AVAILABLE.
- (9) SEAL FOR 1-1/4" STRAPPING (10 REQD). DOUBLE CRIMP EACH SEAL.

LOAD AS SHOWN

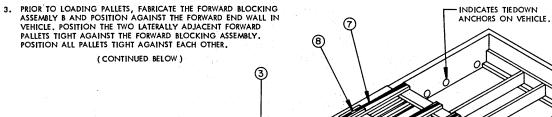
WEIGHT (APPROX) ITEM --- 14 ----- 9,380 LBS PALLETIZED UNIT -----DUNNAGE -----

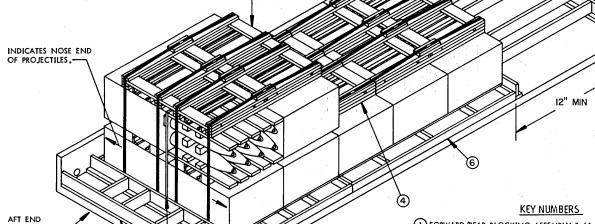
TOTAL WEIGHT ----- 10,236 LBS

ALTERNATIVE PROCEDURES FOR TRANSPORTING THE PALLETIZED PROJECTILES

OF VEHICLE

- I. A MAXIMUM LOAD OF FOURTEEN PALLETIZED UNITS IS SHOWN IN A TRUCK, CARGO, 5-TON, M55, HAVING INSIDE DIMENSIONS OF 244" LONG BY 88" WIDE. THE MAXIMUM LOAD IS BASED ON THE OFF-HIGHWAY LOAD WEIGHT LIMIT FOR THIS VEHICLE.
- THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY AND VEHICLES OF OTHER DIMENSIONS, AND/OR TRAILERS, HAVING STRONG SIDE WALLS AND END WALLS, MAY BE USED.





(SPECIAL NOTES CONTINUED)

➂

ISOMETRIC VIEW

4. ALL PALLETS MUST BE POSITIONED WITH BASE ENDS BUTTED TOGETHER AND NOSE ENDS POINTING TO SIDES OF VEHICLE.

(2)

12"MIN

- PALLETS WHICH REQUIRE STRAPPING ASSEMBLY A MUST ALWAYS BE POSI-TIONED WITH THE BASE END OF PROJECTILES BUTTED TOGETHER, AS SHOWN.
- STRAPPING ASSEMBLY C MUST NEVER BE USED ON PALLETS WHICH ARE POSITIONED AT REAR OR FORWARD END OF LOAD.
- 7. IF LOADING LESS PALLETIZED UNITS THAN SHOWN USE THESE SAME PROCEDURES, DO NOT STACK PALLETS UNLESS NECESSARY FOR MAXIMUM LOAD.

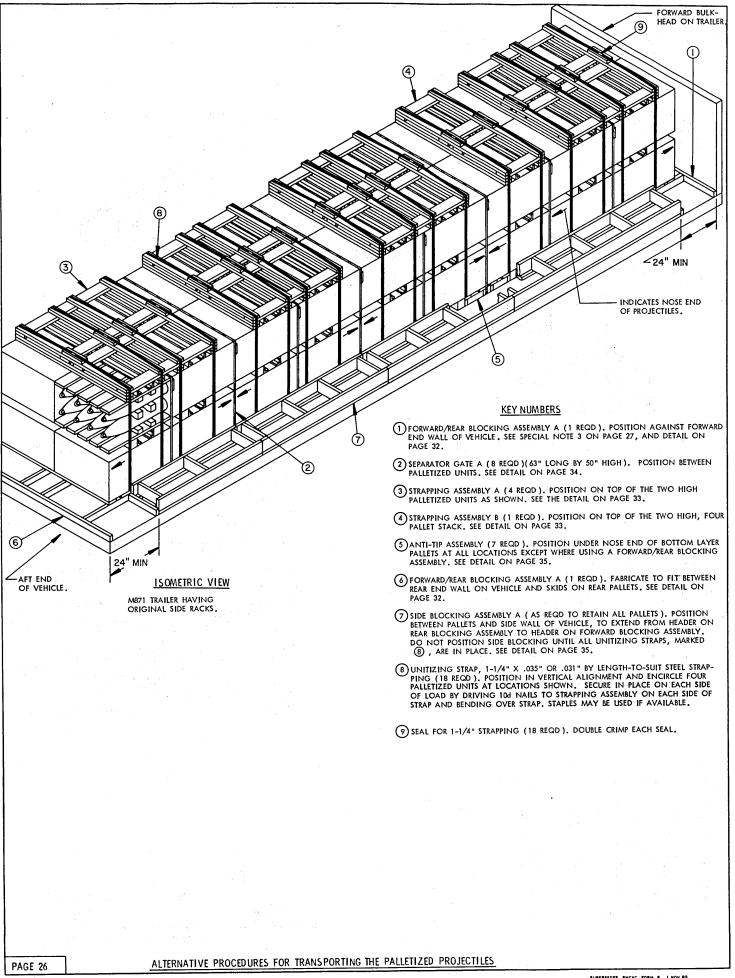
- 1) FORWARD/REAR BLOCKING ASSEMBLY B (1 REQD), POSITION AGAINST FORWARD END WALL OF VEHICLE. SEE SPECIAL NOTE 3 ON THIS PAGE AND DETAIL ON PAGE 32.
- (2) SEPARATOR GATE A (3 REQD). (ONE 63" LONG BY 50" HIGH, ONE 63" LONG BY 25" HIGH, AND ONE 31-1/2" LONG BY 25" HIGH). POSITION BETWEEN PALLETIZED UNITS. SEE DETAIL ON PAGE 34.
- 3 STRAPPING ASSEMBLY A (2 REQD), POSITION ON TOP OF THE TWO HIGH AND/OR ONE HIGH PALLETIZED UNITS AS SHOWN, SEE THE DETAIL ON PAGE 33.
- 4 STRAPPING ASSEMBLY C (1 REQD), POSITION ON TOP OF THE ONE HIGH, TWO PALLET STACK, SEE DETAIL ON PAGE 33.
- (5) FORWARD/REAR BLOCKING ASSEMBLY B (1 REQD). FABRICATE TO FIT BETWEEN REAR END WALL ON VEHICLE AND SKIDS ON REAR PALLETS. SEE DETAIL ON PAGE 32.
- (6) SIDE BLOCKING ASSEMBLY B (AS REQD TO RETAIN ALL PALLETS), POSITION BETWEEN PALLET SKIDS AND SIDE WALL OF VEHICLE, TO EXTEND FROM HEADER ON REAR BLOCKING ASSEMBLY TO HEADER ON FORWARD BLOCKING ASSEMBLY. SEE DETAIL ON PAGE 35.
- 7 UNITIZING STRAP, 1-1/4" X .035" OR .031" BY LENGTH-TO-SUIT STEEL STRAPPING (12 REQD), POSITION IN VERTICAL ALIGNMENT AND ENCIRCLE FOUR, TWO AND/OR ONE PALLETIZED UNITS AT LOCATIONS SHOWN. SECURE IN PLACE BY DRIVING 104 NAILS TO STRAPPING ASSEMBLY ON EACH SIDE OF STRAP AND BENDING OVER STRAP. STAPLES MAY BE USED IF AVAILABLE.
- (8) SEAL FOR 1-1/4" STRAPPING (12 REQD). DOUBLE CRIMP EACH SEAL.

BILL OF MATERIAL	
LINEAR FEET	BOARD FEET
139 297 95	70 198 95
NO. REQD	POUNDS
270 372	1-3/4 5-3/4
	LINEAR FEET 139 297 95 NO. REQD 270

STEEL STRAPPING, 1-1/4" X .035" OR .031" -- 201' REGD ----- 29 LBS SEAL FOR 1-1/4" STRAPPING ------ 12 REGD --- 1/2 LB LOAD AS SHOWN

TOTAL WEIGHT -----10,143 LBS

ALTERNATIVE PROCEDURES FOR TRANSPORTING THE PALLETIZED PROJECTILES



- 1. A MAXIMUM LOAD OF THIRTY-SIX PALLETIZED UNITS IS SHOWN ON A TRAILER, 22-1/2-TON, M871, HAVING DIMENSIONS OF 354" LONG BY 96" WIDE, AND HAVING ORIGINAL SIDE RACKS. THE MAXIMUM LOAD IS BASED ON THE SIZE OF THE TRAILER. FLOATING DUNNAGE IS DEPICTED. IF NAIL DOWN DUNNAGE IS DESIRED USE THE PROCEDURES SHOWN ON PAGE 29. HOWEVER, BECAUSE OF THE STEEL DECK AT THE FORWARD END OF THE TRAILER, ONLY A PARTIAL LOAD CAN BE ACHIEVED. CAUTION. FLOATING DUNNAGE, AS SHOWN IN THE LOAD ON PAGE 26, CANNOT BE USED ON THE M871 TRAILER HAVING DROP SIDES. SEE PAGE 29 IF LOADING DROP SIDE TRAILER.
- THE TRAILER SHOWN WAS SELECTED AS TYPICAL ONLY AND TRAILERS OF OTHER DIMENSIONS, AND OR VEHICLES, HAVING STRONG SIDE WALLS AND END WALLS, MAY BE USED.
- 3. PRIOR TO LOADING PALLETS, FABRICATE THE FORWARD BLOCKING ASSEMBLY A, MARKED (1), AND POSITION AGAINST THE FORWARD END WALL ON TRAILER. POSITION THE FIRST TWO BOTTOM, LATERALLY ADJACENT PALLETIZED UNITS IN POSITION WITH THE SKIDS TIGHT AGAINST THE FORWARD BLOCKING ASSEMBLY. POSITION ALL PALLETS TIGHT AGAINST EACH OTHER.
- 4. AFTER ALL PALLETIZED UNITS ARE LOADED, FABRICATE THE REAR BLOCKING ASSEMBLY A, MARKED (a), AND SLIDE IT INTO POSITION UNDER THE PALLET OVERHANG AND TIGHT AGAINST THE PALLET SKIDS. INSTALL AND SECURE REAR RACK ON TRAILER.
- 5. ALL PALLETIZED UNITS MUST BE POSITIONED ON THE TRAILER WITH THE NOSE END POINTING FORE AND/OR AFT AS SHOWN IN THE LOAD ON PAGE 26, PALLETS WHICH REQUIRE STRAPPING ASSEMBLY A MUST ALWAYS BE POSITIONED WITH THE BASE END OF PROJECTILES BUTTED TOGETHER. PALLETS AT FORWARD AND REAR END OF LOAD MUST ALWAYS BE POSITIONED WITH NOSE END POINTING TOWARD END WALL.
- STRAPPING ASSEMBLY B MUST NEVER BE USED ON PALLETS WHICH ARE POSITIONED AT REAR OR FORWARD END OF LOAD.
- IF LOADING LESS PALLETIZED UNITS THAN SHOWN, USE THESE SAME PRO-CEDURES. DO NOT STACK PALLETS UNLESS NECESSARY FOR MAXIMUM LOAD.
- 8. DO NOT POSITION PALLETIZED UNITS AGAINST THE FORWARD BULKHEAD OR REAR RACKS ON TRAILER AS THE VERTICAL AND LONGITUDINAL MOVEMENT OF THE PALLETIZED UNITS DURING OFF-HIGHWAY TRANSPORT MAY DAMAGE THE TRAILER AND/OR THE PALLETIZED UNITS.
- P. IF DESIRED, THE PALLETIZED UNITS MAY BE TURNED 90°, WITH THE BASE END OF PROJECTILES BUTTED TOGETHER AT CENTER OF TRAILER AND NOSE END OF PROJECTILES POINTING TOWARD SIDE WALL, AS SHOWN IN/ON THE CARGO TRUCK ON PAGE 25. A MAXIMUM LOAD OF FORTY PALLETIZED UNITS CAN BE ACHIEVED USE THE LOADING PROCEDURES, AND DUNNAGE ASSEMBLIES, DEPICTED IN THE LOAD ON PAGE 25 FOR GUIDANCE.

	BILL OF MATERIAL	
LUMBER	LINEAR FEET	BOARD FEET
1" X 6" 2" X 4" 2" X 6"	470 592 206	235 395 206
NAILS	NO. REQD	POUNDS
6d (2") 10d (3")	696 796	4-1/4 12-1/2

STEEL STRAPPING, 1-1/4" X .035" OR .031" - 384' REQD ---- 5 LBS SEAL FOR 1-1/4" STRAPPING ----- 18 REQD ---- 1 LB

LOAD AS SHOWN

<u>QUANTITY</u>

WEIGHT (APPROX)

PALLETIZED UNIT ----- 36 ----- 24,120 LBS DUNNAGE ----- 1,764 LBS

TOTAL WEIGHT ----- 25,866 LBS

- 1. A MAXIMUM LOAD OF TWENTY PALLETIZED UNITS IS SHOWN ON A TRAILER 22-1/2-TON, M871, HAVING DIMENSIONS OF 354" LONG BY 96" WIDE, AND MODIFIED WITH DROP SIDES. THE MAXIMUM LOAD IS BASED ON THE LENGTH OF THE WOOD PORTION OF THE TRAILER FLOOR. NAIL DOWN DUNNAGE IS DEPICTED. CAUTION: FLOATING DUNNAGE AS USED IN THE LOAD ON PAGE 26 MUST NOT BE USED ON THIS TRAILER. THE VERTICAL AND LATERAL MOVEMENT OF THE PALLETIZED UNITS DURING OFF-HIGHWAY TRANSPORT FORCES THE FLOATING SIDE BLOCKING AGAINST THE HINGED DROP SIDE WALLS, WHICH MAY CAUSE SIDE WALL DAMAGE.
- 2. PRIOR TO LOADING PALLETS, PRE-POSITION THE FORWARD HEADER AND BACK-UP CLEATS ON THE WOOD PORTION OF THE TRAILER FLOOR AND NAIL IN PLACE AS INSTRUCTED IN KEY NUMBERS (1) AND (2) ON PAGE 29. POSITION THE FIRST TWO BOTTOM, LATERALLY ADJACENT PALLETIZED UNITS IN POSITION WITH THE SKIDS TIGHT AGAINST THE FORWARD HEADER. POSITION ALL PALLETS TIGHT AGAINST EACH OTHER.
- 3. PRIOR TO LOADING THE REARMOST PALLETS, PRE-POSITION THE REAR HEADER AND BACK-UP CLEATS ON THE WOOD PORTION OF THE TRAILER FLOOR AND NAIL IN PLACE AS INSTRUCTED IN KEY NUMBERS (1) AND (2) ON PAGE 29, WHEN THE REAR TWO BOTTOM PALLETS ARE IN POSITION THE SKIDS SHOULD BE ALMOST TOUCHING THE REAR HEADER.
- 4. ALL PALLETIZED UNITS MUST BE POSITIONED ON THE TRAILER WITH THE NOSE END POINTING FORE AND/OR AFT AS SHOWN IN THE LOAD ON PAGE 29. PALLETS WHICH REQUIRE STRAPPING ASSEMBLY A MUST ALWAYS BE POSITIONED WITH THE BASE END OF PROJECTILES BUTTED TOGETHER. PALLETS AT FORWARD AND REAR END OF LOAD MUST ALWAYS BE POSITIONED WITH NOSE END POINTING TOWARD END WALL.
- 5. STRAPPING ASSEMBLY B MUST NEVER BE USED ON PALLETS WHICH ARE POSITIONED AT REAR OR FORWARD END OF LOAD.
- 6. IF LOADING LESS PALLETIZED UNITS THAN SHOWN, USE THESE SAME PROCEDURES. DO NOT STACK PALLETS UNLESS NECESSARY FOR MAXIMUM LOAD.
- 7. DO NOT POSITION PALLETIZED UNITS AGAINST THE FORWARD BULKHEAD OR REAR RACKS ON TRAILER AS THE VERTICAL AND LONGITUDINAL MOVEMENT OF THE PALLETZIED UNITS DURING OFF-HIGHWAY TRANSPORT MAY DAMAGE THE TRAILER AND/OR THE PALLETIZED UNITS.

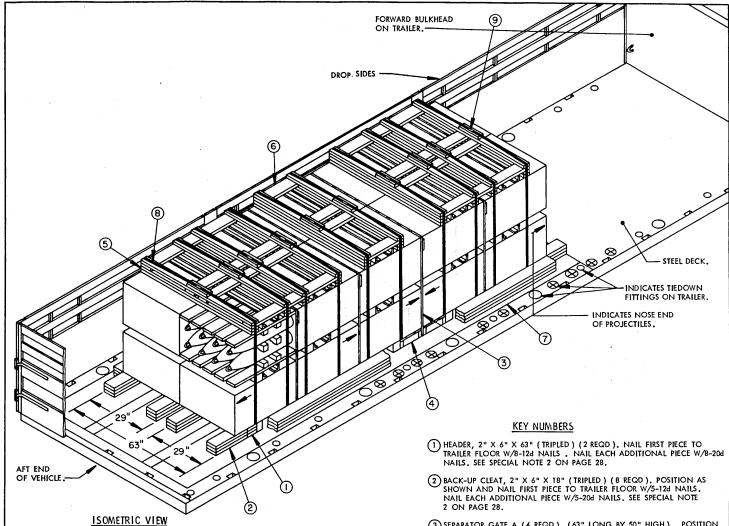
	BILL OF MATERIAL	•
LUMBER	LINEAR FEET	BOARD FEET
1" × 6" 2" × 4" 2" × 6"	219 232 203	110 1 5 5 203
NAILS	NO. REQD	POUNDS
6d (2") 10d (3") 12d (3-1/4") 20d (4")	312 446 194 112	2 7 3-1/4 4

STEEL STRAPPING 1-1/4" X .035" OR .031"-- 214' REQD ------ 31 LBS SEAL FOR 1-1/4" STRAPPING ------- 10 REQD ------1/2 LB

LOAD AS SHOWN

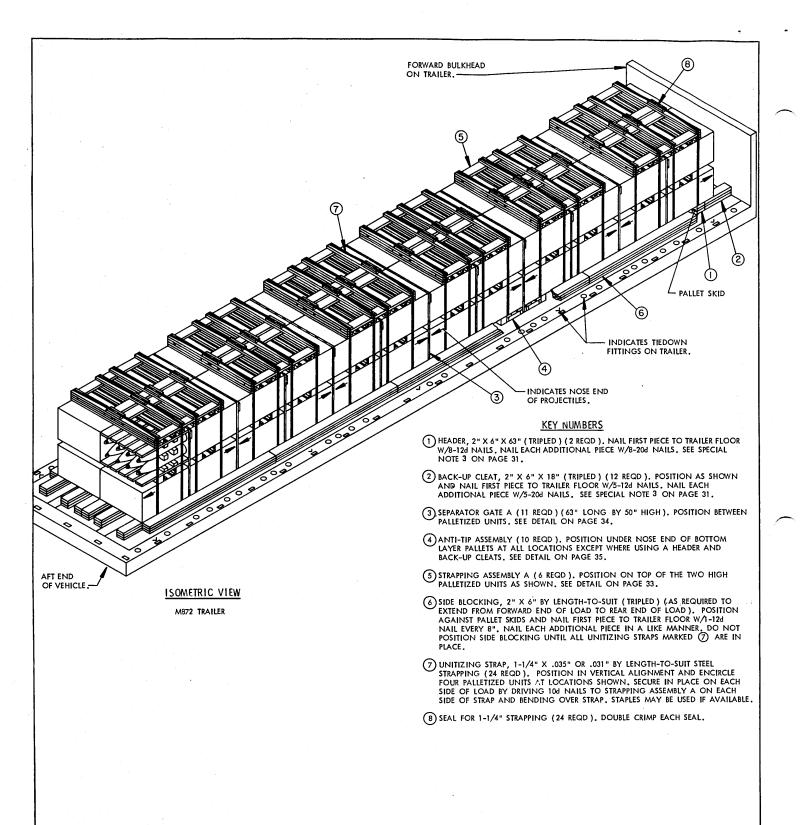
PAGE 28

ALTERNATIVE PROCEDURES FOR TRANSPORTING THE PALLETIZED PROJECTILES



M871 TRAILER MODIFIED WITH DROP SIDES.

- $\begin{tabular}{ll} \hline \begin{tabular}{ll} \hline \end{tabular} \hline \end{tabular} \end{tabul$
- (4) ANTI-TIP ASSEMBLY (3 REQD), POSITION UNDER NOSE END OF BOTTOM LAYER PALLETS AT ALL LOCATIONS EXCEPT WHERE USING A HEADER AND BACK-UP CLEATS, SEE DETAIL ON PAGE 35.
- (5) STRAPPING ASSEMBLY A (2 REQD), POSITION ON TOP OF THE TWO HIGH PALLETIZED UNITS AS SHOWN, SEE DETAIL ON PAGE 33,
- 6 STRAPPING ASSEMBLY B (1 REQD), POSITION ON TOP OF THE TWO HIGH, FOUR PALLET STACK, SEE DETAIL ON PAGE 33.
- (7) SIDE BLOCKING, 2" X 6" BY LENGTH-TO-SUIT (TRIPLED) (AS REQUIRED TO EXTEND FROM FORWARD END OF LOAD TO REAR END OF LOAD). POSITION AGAINST PALLET SKIDS AND NAIL FIRST PIECE TO TRAILER FLOOR W/1-124 NAIL EVERY 8". NAIL EACH ADDITIONAL PIECE IN A LIKE MANNER, DO NOT POSITION SIDE BLOCKING UNTIL ALL UNITIZING STRAPS MARKED (8) ARE IN PLACE.
- (B) UNITIZING STRAP, 1-1/4" X .035" OR .031" BY LENGTH-TO-SUIT STEEL STRAPPING (10 REQD), POSITION IN VERTICAL ALIGNMENT AND ENCIRCLE FOUR PALLETIZED UNITS AT LOCATIONS SHOWN. SECURE IN PLACE ON EACH SIDE OF LOAD BY DRIVING 10d NAILS TO STRAPPING ASSEMBLY ON EACH SIDE OF STRAP AND BENDING OVER STRAP. STAPLES MAY BE USED IF AVAILABLE.
- (9) SEAL FOR 1-1/4" STRAPPING (10 REQD). DOUBLE CRIMP EACH SEAL.

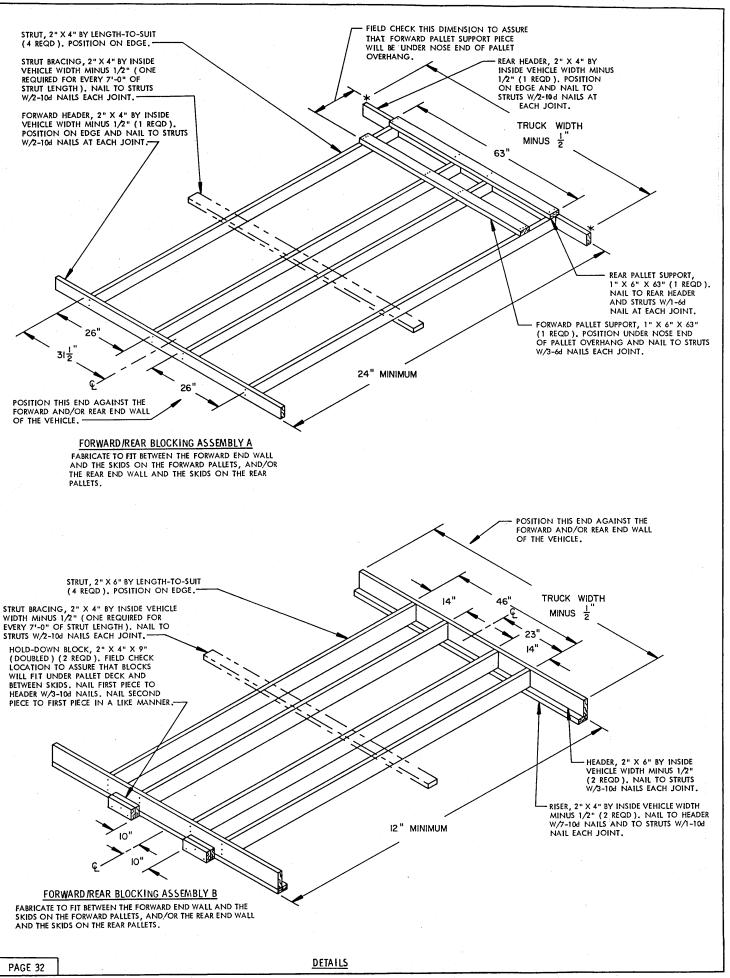


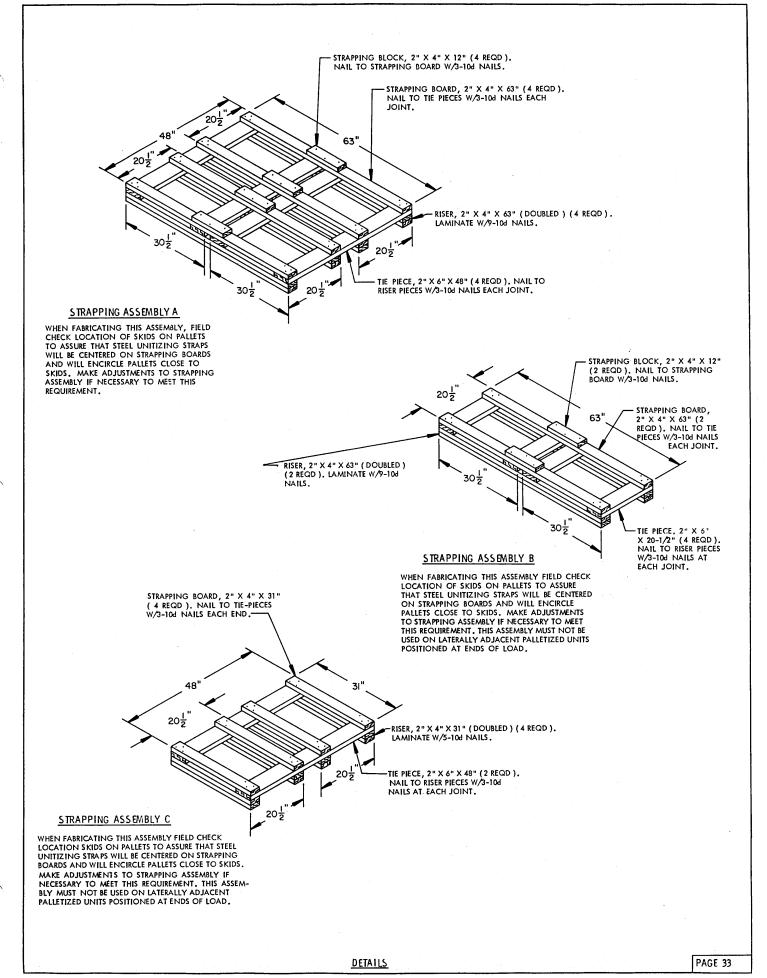
- A MAXIMUM LOAD OF FORTY-EIGHT PALLETIZED UNITS IS SHOWN ON A TRAILER, 34-TON, M872, HAVING DIMENSIONS OF 485-1/2" LONG BY 96" WIDE. THE MAXIMUM LOAD IS BASED ON THE SIZE OF THE TRAILER. NAIL DOWN DUNNAGE IS DEPICTED. IF FLOATING DUNNAGE IS DESIRED, USE THE PROCEDURES SHOWN ON PAGE 26.
- THE TRAILER SHOWN WAS SELECTED AS TYPICAL ONLY AND TRAILERS OF OTHER DIMENSIONS, AND OR VEHICLES, HAVING STRONG SIDE WALLS AND END WALLS, MAY BE USED.
- 3. PRIOR TO LOADING PALLETS, PRE-POSITION THE FORWARD HEADER AND BACK-UP CLEATS ON THE WOOD PORTION OF THE TRAILER FLOOR AND NAIL IN PLACE AS INSTRUCTED IN KEY NUMBERS () AND (2) ON PAGE 30. POSITION THE FIRST TWO BOTTOM, LATERALLY ADJACENT PALLETIZED UNITS IN POSITION WITH THE SKIDS TIGHT AGAINST THE FORWARD HEADER. POSITION ALL PALLETS TIGHT AGAINST EACH OTHER.
- 4. PRIOR TO LOADING THE REARMOST PALLETS, PRE-POSITION THE REAR HEADER AND BACK-UP CLEATS ON THE WOOD PORTION OF THE TRAILER FLOOR AND NAIL IN PLACE AS INSTRUCTED IN KEY NUMBERS ① AND ② ON PAGE 30. WHEN THE REAR TWO BOTTOM PALLETS ARE IN POSITION THE SKIDS SHOULD BE ALMOST TOUCHING THE REAR HEADER.
- 5. ALL PALLETIZED UNITS MUST BE POSITIONED ON THE TRAILER WITH NOSE END POINTING FORE AND/OR AFT AS SHOWN IN THE LOAD ON PAGE 30. PALLETS WHICH REQUIRE STRAPPING ASSEMBLY A MUST ALWAYS BE POSITIONED WITH THE BASE END OF PROJECTILES BUTTED TOGETHER. PALLETS AT FORWARD AND REAR END OF LOAD MUST ALWAYS BE POSITIONED WITH NOSE END POINTING TOWARD END WALL.
- IF LOADING LESS PALLETIZED UNITS THAN SHOWN USE THESE SAME PRO-CEDURES. DO NOT STACK PALLETS UNLESS NECESSARY FOR MAXIMUM LOAD.
- 7. DO NOT POSITION PALLETIZED UNITS AGAINST THE FORWARD BULKHEAD OR REAR RACKS ON TRAILER AS THE VERTICAL AND LONGITUDINAL MOVEMENT OF THE PALLETIZED UNITS DURING OFF-HIGHWAY TRANSPORT MAY DAMAGE THE TRAILER AND/OR THE PALLETIZED UNITS.
- 8. IF DESIRED, THE PALLETIZED UNITS MAY BE TURNED 90°, WITH THE BASE END OF PROJECTILES BUTTED TOGETHER AT CENTER OF TRAILER AND NOSE END OF PROJECTILES POINTING TOWARD SIDE WALL, AS SHOWN IN/ON THE CARGO TRUCK ON PAGE 25. A MAXIMUM LOAD OF FIFTY-SIX PALLETIZED UNITS CAN BE ACHIEVED. USE THE LOADING PROCEDURES AND "FLOATING DUNNAGE ASSEMBLIES" DEPICTED IN THE LOAD ON PAGE 25 FOR GUIDANCE.

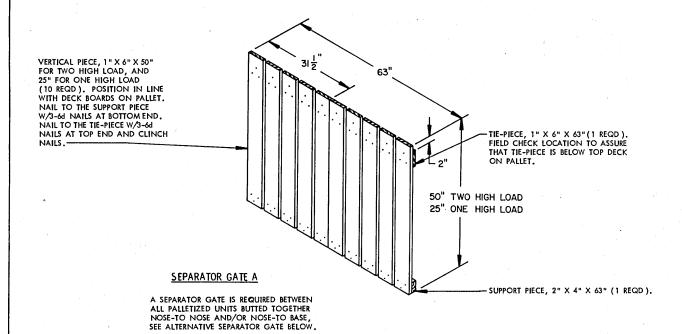
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	621	311
2" X 4"	605	405
2" X 6"	389	389
NAILS	NO. REQD	POUNDS
6d (2")	900	5-1/2
10d (3")	1,006	15-1/2
12d (3-1/4")	418	7
16d (4")	176	6-1/4

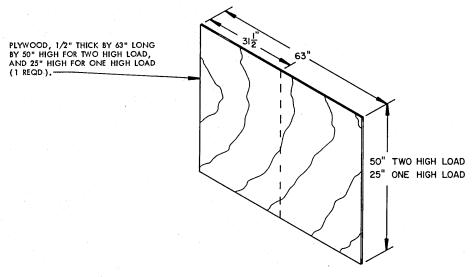
LOAD AS SHOWN

ITEM	QUANTITY	WEIGI	<u>IT</u> (APPROX
PALLETIZED UNIT	48	32,160	LBS
DUNNAGE		2,306	LBS
	TOTAL WEIGHT	34,466	LBS









ALTERNATIVE SEPARATOR GATE

IF AVAILABLE, PLYWOOD MAY BE USED IN LIEU OF THE SEPARATOR GATE A SHOWN ABOVE.

PAGE 34

DETAILS

