



## 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 LOOSE AND/OR PALLETIZED PROPELLING CHARGE CONTAINERS, SECURED WITH WEB STRAP TIEDOWN ASSEMBLIES, IN/ON TACTICAL TYPE VEHICLES, FOR ON AND/OR OFF HIGHWAY. SEE NOTE "D" BELOW.
- C. 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 34 FOR GUIDANCE.
- D. ALL LOADS SHOWN HEREIN ARE TYPICAL AND ARE BASED ON TESTED PROCEDURES FOR OFF HIGHWAY TRANSPORT OF LOOSE AND/OR PALLETIZED PROPELLING CHARGE CONTAINERS. COMBINATIONS OF PROCEDURES MAY BE USED IN/ON ANY TACTICAL VEHICLE. HOWEVER, THE APPROVED METHODS SPECIFIED HEREIN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE.
- E. BECAUSE OF THE FACT THAT ALL LOADS SHOWN HEREIN ARE TYPICAL IT IS MOST LIKELY THAT THE ACTUAL QUANTITY TO BE TRANSPORTED WILL NOT BE DEPICTED. 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 TYPICAL LOADS AND PROCEDURES SHOWN HEREIN FOR GUIDANCE. THIS SKETCH WOULD BE ADVANTAGEOUS FOR MAXIMUM LOADS USING A MINIMUM QUANTITY OF WEB STRAP TIEDOWN ASSEMBLIES.
- F. WEB STRAP TIEDOWN ASSEMBLIES MUST BE SECURELY HOOKED INTO ANCHORING DEVICES ON THE TRANSPORTING VEHICLE AND RATCHETED TIGHT, PRIOR TO MOVING THE VEHICLE. WHEN INSTALLING STRAPS ASSURE THAT THERE ARE NO "TWISTS" AND/OR "KNOTS" IN STRAP. THE STRAP MUST FORM A STRAIGHT "LAY" ON THE RATCHET TAKE-UP SPOOL LENGTH. PRIOR TO RATCHETING THE STRAP TIGHT, PULL EXCESS LENGTH OF SLACK STRAP THROUGH THE RATCHET TAKE-UP SPOOL UNTIL ENOUGH STRAP LENGTH REMAINS TO FORM AT LEAST ONE-HALF, BUT NOT MORE THAN ONE AND ONE-HALF WRAPS OF STRAP ON THE RATCHET TAKE-UP SPOOL, AFTER STRAP-TO-STRAP CONTACT HAS BEEN MADE (STRAP-TO-STRAP CONTACT IS MADE BY ROTATING THE TAKE-UP SPOOL UNTIL NO METAL ON THE SPOOL IS SHOWING AND THE STRAP IS IN CONTACT WITH ITSELF). NOTE: WHEN THE TAKE-UP SPOOL OF THE RATCHET ASSEMBLY IS ROTATED BY MOVING THE RATCHET HANDLE TO TENSION A STRAP ASSEMBLY, TWO THICKNESSES OF STRAP WILL BE WOUND ONTO THE SPOOL AT THE SAME TIME. THEREFORE, THE REQUIREMENT FOR ONE-HALF TO ONE AND ONE-HALF WRAPS OF STRAP ON THE TAKE-UP SPOOL ACTUALLY MEANS ONE-HALF TO ONE AND ONE-HALF OF DOUBLED STRAP. ONE METHOD THAT CAN BE USED TO ENSURE THERE IS ONE-HALF WRAP OF STRAP ON THE RATCHET TAKE-UP SPOOL AFTER STRAP-TO-STRAP CONTACT HAS BEEN MADE IS TO COUNT THE AUDIBLE "CLICKS" MADE BY THE RATCHET ASSEMBLY AS A WEB STRAP IS BEING RATCHETED. FOR EXAMPLE, IF THE RATCHET ASSEMBLY HAS NINE TEETH, STARTING WITH A BARE TAKE-UP SPOOL, COUNT FOURTEEN "CLICKS" AS THE TAKE-UP SPOOL IS BEING ROTATED. IF THE RATCHET ASSEMBLY HAS ELEVEN TEETH, COUNT SEVENTEEN "CLICKS". 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, LOCATED ON EACH END OF THE TAKE-UP SPOOL. AFTER TENSIONING IS COMPLETED THE LOOSE END OF STRAP MAY BE FOLDED AND SECURED TO THE TENSIONED STRAP WITH TAPE, WIRE, STRING, VELCRO STRIP, OR OTHER MEANS.
- G. ADJUSTABLE SCUFF SLEEVES, WHEN 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 TIEDOWN ASSEMBLIES. METAL PARTS OF A STRAP ASSEMBLY SHOULD BE LOCATED SO AS TO AVOID CONTACT WITH THE PROPELLING CHARGE CONTAINERS. IF CONTACT 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 PROPELLING CHARGE CONTAINERS, AND IF NECESSARY, TAPED OR TIED IN POSITION.
- H. IF THE SIDE RACKS FOR A SEMITRAILER ARE TO BE TRANSPORTED ON THE LOADED TRAILER, THEY WILL BE STACKED ON THE TRAILER AND SECURED WITH A SUFFICIENT QUANTITY OF WEB STRAP TIEDOWN ASSEMBLIES TO PREVENT LOSS DURING TRANSPORT. NOTE: IF DESIRED, THE SIDE RACKS FOR THE M871 AND M872 SEMITRAILERS MAY BE POSITIONED IN PLACE AFTER THE LOAD HAS BEEN SECURED. AFTER ALL SIDE PANELS AND REAR PANELS ARE IN POSITION THE STAKES MUST BE SECURELY "TINNED" OR "WIRE-TIED" TO THE STAKE POCKETS 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. NOTE: THESE PROCEDURES DO NOT APPLY TO M871 AND M872 SEMITRAILERS WHICH HAVE BEEN MODIFIED WITH DROP SIDES.

(CONTINUED AT RIGHT)

## MATERIAL SPECIFICATIONS

- STRAP----- WEBBING, UNIVERSAL TIEDOWN, NSN 5340-00-990-9277, PN 10900880; OR NSN 1670-00-725-1437, PN 0376-013. ALTERNATIVE: NSN 5340-01-089-4997, PN 11669588.
- ANTI-CHAFING MATERIAL----- CANVAS, BURLAP, TAPE OR ANY OTHER SUITABLE MATERIAL.

## (GENERAL NOTES CONTINUED)

- J. THE TIEDOWN PROCEDURES SHOWN WITHIN THIS DRAWING ALSO APPLY TO DROP SIDE VEHICLES HAVING TIEDOWN ANCHORS INSTALLED ON THE DROP SIDES. THE TAILGATE MUST ALWAYS BE IN THE CLOSED POSITION TO HELP STRENGTHEN THE DROP SIDES, WHEN THIS TYPE VEHICLE IS BEING USED TO TRANSPORT AMMUNITION.
- K. DURING LONG HAULS, WHEN POSSIBLE, STRAPS SHOULD BE CHECKED DURING VEHICLE STOPS AND TIGHTENED, IF NECESSARY.
- L. 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.
- M. THE TIEDOWN METHODS WITHIN THIS DRAWING SHOW TWO HOOKS TO BE CONNECTED TO ONE TIEDOWN EYE. THIS IS AUTHORIZED AS SPECIFIED HEREIN.
- N. 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 0.453KG.
- O. 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.
- P. WHEN ONE WEB STRAP TIEDOWN ASSEMBLY IS NOT LONG ENOUGH TO SPAN THE DISTANCE DEPICTED, TWO ASSEMBLIES MAY BE HOOKED TOGETHER TO GAIN THE NECESSARY LENGTH.
- Q. FOR ADDITIONAL GUIDANCE ATTENTION IS DIRECTED TO THE LOADING, TIEDOWN, AND UNLOADING PROCEDURES ON PAGE 5, AND THE "SPECIAL NOTES" SECTIONS ON PAGES 6, 20, AND 26.

## ITEM

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<u>NOTE:</u> IF LOADING A "HEMTT" SEE SPECIAL HEMTT LOADING SECTION BELOW.	

SECUREMENT OF LOOSE AND/OR PALLETIZED PROPELLING CHARGE CONTAINERS IN THE HEAVY EXPANDED MOBILITY TACTICAL TRUCK (HEMTT), 10-TON, M977 AND/OR M985

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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 AS LONG AS THEY COMPLY WITH GENERAL NOTE "C" ON PAGE 2. SEE THE "LOAD PLANNING GUIDANCE CHART" ON THIS PAGE. ALSO, THE PALLETIZED AND/OR LOOSE PROPELLING CHARGES SHOWN IN THE TACTICAL VEHICLES HAVE BEEN SELECTED AS TYPICAL, AND THE METHODS USED TO SECURE THEM MAY BE USED FOR OTHER TYPES OF PROPELLING CHARGES.

## LOAD PLANNING GUIDANCE CHART

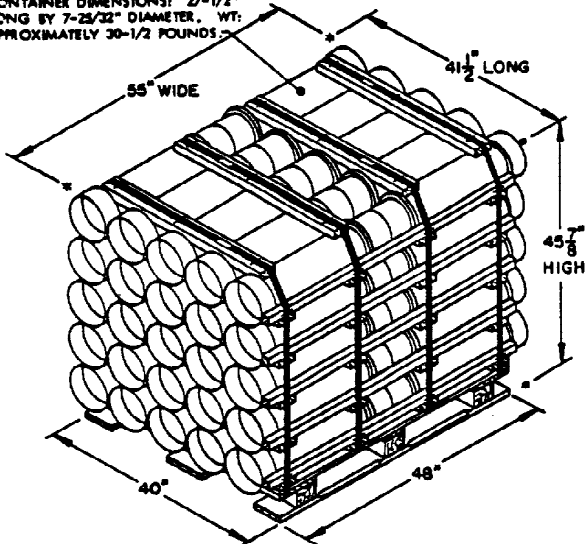
WHEN TRANSPORTING PROPELLING CHARGES ON TACTICAL VEHICLES USE THE FOLLOWING CHART FOR LOAD PLANNING GUIDANCE. SEE "NOTE \*" ON THIS PAGE.

TACTICAL VEHICLE			PROPELLING CHARGES	
			PALLETIZED SEE PAGE (S)	LOOSE SEE PAGE (S)
M100	CARGO TRAILER	1/4-TON	NOT APPLICABLE	22 THRU 25
M101	CARGO TRAILER	3/4-TON	7	22 THRU 25
M105	CARGO TRAILER	1-1/2-TON	7,8	22 THRU 25
M332	AMMO TRAILER	1-1/2-TON	7	22 THRU 25
M127	SEMITRAILER	12-TON	17, 18, 19	22, 24, 25
M871	SEMITRAILER	22-1/2-TON	17, 18, 19	22, 24, 25
M872	SEMITRAILER	34-TON	17, 18, 19	22, 24, 25
M37	CARGO TRUCK	3/4-TON	7	22 THRU 25
M561	CARGO TRUCK	1-1/4-TON	7,8	22 THRU 25
M715	CARGO TRUCK	1-1/4-TON	7,8	22 THRU 25
M1008	CARGO TRUCK	1-1/4-TON	7	22 THRU 25
M34	CARGO TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M35	CARGO TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M36/M36C	CARGO TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M135	CARGO TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M211	CARGO TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M602	CARGO TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M621	CARGO TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M47	DUMP TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M39	DUMP TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M215	DUMP TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M342	DUMP TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M614	DUMP TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M624	DUMP TRUCK	2-1/2-TON	7 THRU 14	22 THRU 25
M41	CARGO TRUCK	5-TON	7 THRU 14	22 THRU 25
M54	CARGO TRUCK	5-TON	7 THRU 14	22 THRU 25
M55	CARGO TRUCK	5-TON	7 THRU 14	22 THRU 25
M656	CARGO TRUCK	5-TON	7 THRU 14	22 THRU 25
M813	CARGO TRUCK	5-TON	7 THRU 14	22 THRU 25
M814	CARGO TRUCK	5-TON	7 THRU 14	22 THRU 25
M939	CARGO TRUCK	5-TON	7 THRU 14	22 THRU 25
M51	DUMP TRUCK	5-TON	7 THRU 14	22 THRU 25
M817	DUMP TRUCK	5-TON	7 THRU 14	22 THRU 25
M348	CARGO CARRIER	6-TON	7 THRU 15	22 THRU 25
M820	CARGO TRUCK	8-TON	7 THRU 16	22 THRU 25
M125	CARGO TRUCK	10-TON	7 THRU 14	22 THRU 25
M977/M985	CARGO TRUCK	10-TON	27 THRU 31	32 THRU 35

LOAD PLANNING NOTES:

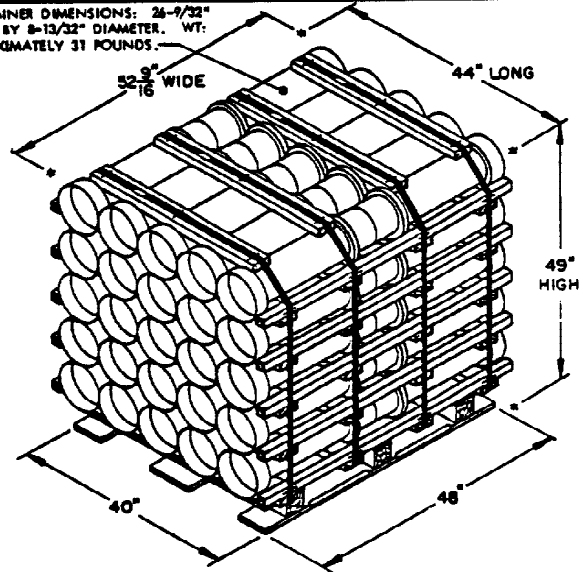
1. DETERMINE THE QUANTITY OF PALLETIZED UNIT (S) AND/OR LOOSE PROPELLING CHARGE CONTAINERS TO BE LOADED IN/ON THE TACTICAL VEHICLE.
2. SELECT THE BEST METHOD OF SECURING THE PALLETIZED UNIT (S) AND/OR LOOSE PROPELLING CHARGE CONTAINERS FROM THE METHODS SHOWN ON THE REFERENCED PAGES. NOTE: A COMBINATION OF METHODS MAY BE USED ON/WITHIN THE SAME TACTICAL VEHICLE.

CONTAINER DIMENSIONS: 27-1/2"  
LONG BY 7-25/32" DIAMETER. WT:  
APPROXIMATELY 30-1/2 POUNDS.



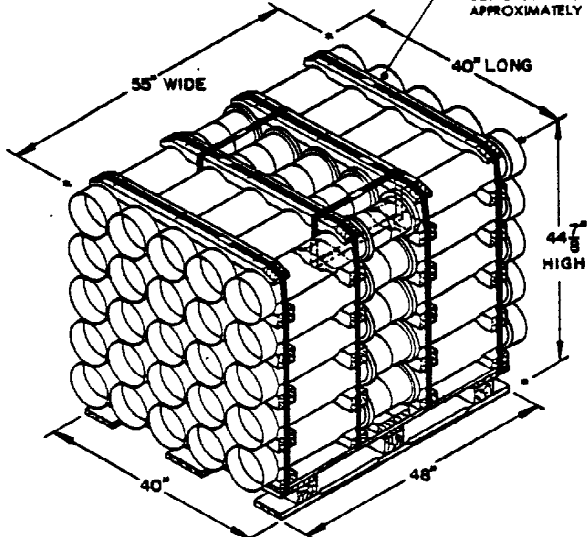
CHARGE, PROPELLING, 155MM,  
PACKED IN M13 SERIES CONTAINER  
(1,751 POUNDS)

CONTAINER DIMENSIONS: 26-7/32"  
LONG BY 8-13/32" DIAMETER. WT:  
APPROXIMATELY 31 POUNDS.



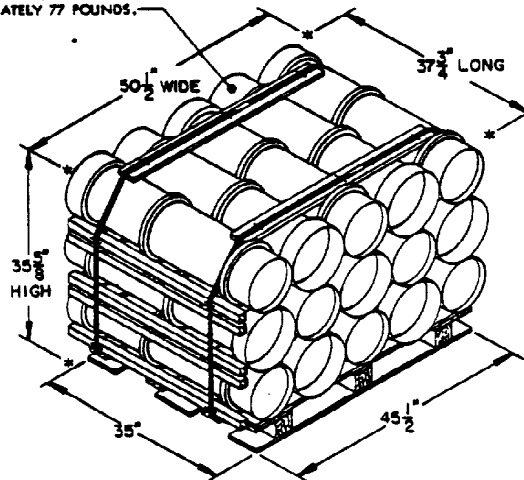
CHARGE, PROPELLING, 8-INCH  
PACKED IN M18 SERIES CONTAINER  
(1,779 POUNDS)

CONTAINER DIMENSIONS: 27-1/2"  
LONG BY 7-25/32" DIAMETER. WT:  
APPROXIMATELY 30-1/2 POUNDS.

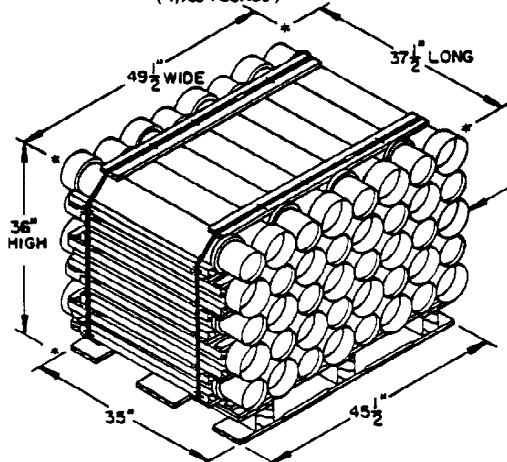


CHARGE, PROPELLING, 155MM,  
PACKED IN M13 SERIES CONTAINER  
(1,766 POUNDS)

CONTAINER DIMENSIONS: 37-3/4"  
LONG BY 10-15/32" DIAMETER. WT:  
APPROXIMATELY 77 POUNDS.



CHARGE, PROPELLING, 8-INCH  
PACKED IN PA66 SERIES CONTAINER  
(1,275 POUNDS)



CHARGE, PROPELLING, 155MM, PACKED  
IN M14 SERIES CONTAINER (1,306 POUNDS)

CONTAINER DIMENSIONS: 37-1/2"  
LONG BY 6-11/16" DIAMETER. WT:  
APPROXIMATELY 28-1/2 POUNDS.

NOTE: THE PROPELLING CHARGE CONTAINERS SHOWN ON THIS PAGE  
WERE SELECTED AS TYPICAL, AND ARE DEPICTED IN LOADS WITHIN THIS  
DOCUMENT.

TYPICAL LADING ITEMS

## LOADING, TIEDOWN, AND UNLOADING PROCEDURES

1. PRIOR TO LOADING AND/OR UNLOADING SET BRAKES ON TACTICAL VEHICLE AND DROP TAILGATE. IF LOADING AND/OR UNLOADING TRUCK OR TRAILER, REMOVE SIDE RACKS FROM SEMITRAILERS, AND CANVAS COVER AND BOWS FROM TRUCK OR TRAILER.
2. AFTER ALL LOADING PROCEDURES ARE COMPLETE, CHECK ALL WEB STRAP TIEDOWN ASSEMBLIES FOR MAXIMUM TIGHTNESS AND RATCHET TIGHTER, IF REQUIRED. PRIOR TO FOLDING UP AND SECURING THE LOOSE ENDS OF STRAP. SEE GENERAL NOTE "G" ON PAGE 2.
3. WHEN TWO STRAPS ARE TO BE ATTACHED TO THE SAME TIEDOWN ANCHOR ATTACH THE RATCHET END OF ONE STRAP AND THE NON-RATCHET END OF THE SECOND STRAP TO THE TIEDOWN ANCHOR, PRIOR TO RATCHETING STRAPS TIGHT.
4. IF THE WEB STRAP TIEDOWN ASSEMBLIES BEING USED DO NOT HAVE SWIVEL HOOKS ON EACH END ASSURE THAT ALL TWISTS ARE OUT OF STRAP PRIOR TO ATTACHING HOOKS TO TIEDOWN ANCHORS.
5. WHEN TRANSPORTING LESS THAN FULL LOADS ON TRUCKS AND/OR SEMI-TRAILERS, DO NOT POSITION PALLETS WITHIN FIVE FEET OF AFT END, IF POSSIBLE, AS THIS IS THE ROUGHEST RIDING AREA IN/ON THE VEHICLE.
6. WHEN USING WEB STRAP TIEDOWN ASSEMBLIES THAT HAVE THE RATCHET AND NON-SWIVEL HOOK ON THE END OF THE STRAP, IT MAY NOT BE POSSIBLE TO PROPERLY OPERATE THE RATCHET IF THE SPACE BETWEEN THE LOAD AND THE VEHICLE SIDE WALL IS LESS THAN 12" AND THE STRAP IS POSITIONED AT A STEEP, NEAR VERTICAL ANGLE. IF THE RATCHET CANNOT BE PROPERLY OPERATED TO ATTAIN A TIGHT STRAP, USE ONE OR MORE OF THE FOLLOWING METHODS.
  - A. HOOK THE RATCHET ENDS OF TWO WEB STRAP TIEDOWN ASSEMBLIES TOGETHER. POSITION THE RATCHETS ON TOP OF THE PALLETIZED UNITS, AND ATTACH THE NON-RATCHET HOOK END OF EACH STRAP TO A TIEDOWN ANCHOR ON EACH SIDE OF THE VEHICLE. MAKE SURE THERE IS A MINIMUM OF ONE-AND-ONE-HALF WRAPS OF STRAP ON ONE RATCHET, THEN TAKE UP EXCESS SLACK IN REMAINING RATCHET AND RATCHET TIGHT. THIS METHOD REQUIRES TWO WEB STRAP TIEDOWN ASSEMBLIES IN LIEU OF EACH STRAP MARKED ①, WHEN USING THE PROCEDURES SHOWN ON PAGES 7, 11, 12, 14, AND 15.
  - B. IF A MAXIMUM LOAD IS NOT REQUIRED, THE PALLETIZED UNITS CAN BE POSITIONED ONE WIDE, DOWN THE CENTER OF THE VEHICLE LENGTH, IN LIEU OF TWO WIDE. SEE THE LOAD SHOWN ON PAGE 10 FOR EXAMPLE.
  - C. TWO LATERALLY ADJACENT PALLETIZED UNITS MAY BE CENTERED BETWEEN TWO TIEDOWN ANCHORS ON EACH SIDE OF THE VEHICLE THAT ARE FARTHER APART THAN THE PALLETIZED UNIT WIDTH, TO WHICH THE HOLD-DOWN WEB STRAPS CAN BE ATTACHED, AND WHICH WILL PROVIDE CLEARANCE BETWEEN THE PALLETIZED UNIT AND THE STRAP RATCHET, AND BETWEEN THE SIDE WALLS OF THE VEHICLE AND THE STRAP RATCHET. SEE THE LOAD SHOWN ON PAGE 13 FOR EXAMPLE.
  - D. ONE PALLETIZED UNIT HAVING A LENGTH OF 40" OR LESS CAN BE POSITIONED LATERALLY ADJACENT TO THE PALLETIZED UNIT HAVING A LENGTH OF 43" OR MORE, TO REDUCE THE TOTAL LOAD WIDTH. SEE THE LOAD SHOWN ON PAGE 29 FOR EXAMPLE.
  - E. WHEN LOADING LATERALLY ADJACENT PALLETIZED UNITS ACROSS THE WIDTH OF A VEHICLE HAVING SIDE WALLS, RATCHET OPERATING SPACE CAN BE GAINED BY ATTACHING NON-RATCHET ENDS OF STRAP TO TIEDOWN ANCHORS IN SIDE WALL AND THEN POSITIONING THE PALLETIZED UNITS AS CLOSE TO THAT SIDE WALL AS POSSIBLE, LEAVING EXCESS SPACE BETWEEN THE LOAD AND THE SIDE WALL ON THE OPPOSITE SIDE OF THE VEHICLE WHERE THE RATCHET WILL BE LOCATED. THIS METHOD MAY ALSO BE USED IN VEHICLES HAVING TIEDOWN ANCHORS LOCATED ON THE FLOOR ALONG EACH SIDE OF THE VEHICLE. AFTER ATTACHING NON-RATCHET ENDS OF STRAP TO TIEDOWN ANCHORS IN FLOOR, POSITION THE PALLETIZED UNITS AS CLOSE TO THE TIEDOWN ANCHORS ON THAT SIDE AS POSSIBLE.
  - F. A WEB STRAP ASSEMBLY, SUCH AS NSN 5340-01-089-4997, HAVING A SHORT LENGTH OF STRAP (AT LEAST 15") BETWEEN THE RATCHET AND THE HOOK END MAY BE USED. THIS TYPE OF WEB STRAP POSITIONS THE RATCHET ABOVE THE SIDE WALLS IN CARGO TRUCKS, AND ALLOWS FOR EASY OPERATION OF THE RATCHET HANDLE.
7. IN SOME LOADS IT MAY NOT BE POSSIBLE TO COMPLETELY CLOSE THE RATCHET HANDLE AFTER TENSIONING STRAP DUE TO LOAD, VEHICLE SIDE WALL, OR PREVIOUSLY INSTALLED STRAP INTERFERENCE. ALTHOUGH THIS CONDITION IS NOT DESIRABLE, IT IS PERMISSIBLE, PROVIDED PROPER STRAP TENSION IS ACHIEVED. NOTE: WHEN ATTACHING A WEB STRAP TIEDOWN ASSEMBLY THAT HAS THE ONE PIECE RATCHET AND NON-SWIVEL HOOK ON THE END OF THE STRAP, TO A TIEDOWN ANCHOR ON THE VEHICLE SIDE WALL, IT MAY BE EASIER TO "WORK" THE RATCHET HANDLE IF IT IS POSITIONED ON THE BOTTOM IN LIEU OF THE TOP. THE POSITION OF THE RATCHET HANDLE WILL DEPEND ON THE ANGLE OF THE STRAP AND THE DISTANCE BETWEEN THE LOAD AND THE SIDE WALL OF THE VEHICLE.
8. PALLETIZED UNITS HAVING A LENGTH DIMENSION OF 44" OR MORE CANNOT BE POSITIONED TWO WIDE IN CARGO TRUCKS HAVING AN INSIDE WIDTH OF 86". IF A MAXIMUM LOAD IS REQUIRED, A PALLETIZED UNIT HAVING A LENGTH DIMENSION OF 43" OR LESS CAN BE POSITIONED LATERALLY ADJACENT TO A PALLETIZED UNIT HAVING A LENGTH DIMENSION OF 44" OR MORE, TO REDUCE THE LOAD WIDTH. SEE THE LOAD SHOWN ON PAGE 9 FOR EXAMPLE.
9. LOADING AND/OR UNLOADING PALLETIZED AND/OR LOOSE PROPELLING CHARGE CONTAINERS MAY BE ACCOMPLISHED BY USE OF FORKLIFTS, SLINGS, AND/OR MANUALLY.

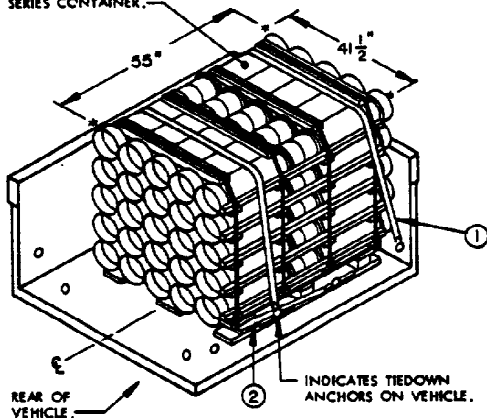
**SPECIAL NOTES:**

( SPECIAL NOTES CONTINUED )

1. THE LOADS SHOWN ON PAGES 7 THROUGH 19 ARE BASED ON TESTED METHODS OF SECURING PALLETIZED PROPELLING CHARGE CONTAINERS IN/ON TACTICAL VEHICLES. THE PROCEDURES SHOWN CAN BE USED IN/ON CARGO TRUCKS SUCH AS THE M54, 3-TON, AND CARGO TRAILERS SUCH AS THE M105, 1-1/2-TON, HAVING TIEDOWN ANCHORS LOCATED IN THE SIDE WALLS AND END WALLS. ALSO, THE PROCEDURES SHOWN CAN BE USED ON SEMITRAILERS SUCH AS THE M871, 22-1/2-TON, AND CARGO TRUCK, SUCH AS THE M977, 10-TON, HEMTT, HAVING TIEDOWN ANCHORS LOCATED ON THE FLOOR. NOTE: IF LOADING A "HEMITT" ALSO SEE THE SPECIAL HEMTT LOADING SECTION ON PAGES 26 THROUGH 28.
2. THE TACTICAL VEHICLES SHOWN ARE TYPICAL ONLY AND OTHER TYPES OF VEHICLES MAY BE USED IN LIEU OF THOSE SHOWN AS LONG AS THEY COMPLY WITH GENERAL NOTE "C" ON PAGE 2.
3. MAXIMUM LOADS ARE SHOWN. HOWEVER, LESSER QUANTITIES MAY BE LOADED AND SECURED USING THE DEPICTED PROCEDURES.
4. PRIOR TO LOADING A TACTICAL VEHICLE, SELECT THE QUANTITY OF PALLETIZED UNITS TO BE LOADED. DO NOT EXCEED THE OFF-HIGHWAY WEIGHT LIMIT OF THE VEHICLE. SELECT A LOCATION AGAINST AN END WALL OR WITHIN THE LENGTH OF THE CARGO BED THAT WILL PROVIDE ADEQUATE TIEDOWN ANCHORS TO SECURE THE LOAD, USING THE TIEDOWN PROCEDURES DEPICTED ON PAGES 17 THROUGH 19 AS GUIDANCE. NOTE: WHEN POSSIBLE, ALWAYS POSITION THE PALLETIZED UNIT (S) AGAINST THE FORWARD END WALL OF THE VEHICLE.
5. EACH SINGLE PALLETIZED UNIT AND/OR TWO ADJACENT PALLETIZED UNITS POSITIONED ACROSS THE WIDTH OF THE VEHICLE, AS SHOWN ON PAGES 7 THROUGH 19 MUST BE SECURED WITH TWO STRAPS ATTACHED TO TIEDOWN ANCHORS ON ONE SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT (S), TO MATING TIEDOWN ANCHORS ON OPPOSITE SIDE OF VEHICLE. NOTE: DO NOT POSITION THESE STRAPS ACROSS LOAD ON LONGITUDINAL JOINTS BETWEEN PALLETIZED UNITS. IF THE TIEDOWN ANCHORS ON SIDE OF VEHICLE ARE TOO CLOSE TOGETHER, TOO FAR APART, OR ARE NOT IN A LOCATION WHICH WILL ALLOW ADEQUATE HOLD DOWN OF PALLETIZED UNIT (S) WHEN STRAPS ARE POSITIONED STRAIGHT OVER TOP OF LOAD, THE TWO HOLD DOWN STRAPS MAY BE CROSSED OVER THE TOP OF THE PALLETIZED UNIT (S), AS SHOWN IN THE LOAD ON PAGE 9.
6. ALL LOADS FROM ONE PALLETIZED UNIT TO A MAXIMUM LOAD OF PALLETIZED UNITS MUST BE SECURED LONGITUDINALLY WITH ONE STRAP AT EACH END, ATTACHED TO A TIEDOWN ANCHOR ON ONE SIDE OF THE VEHICLE AND POSITIONED AROUND THE END (S) OF THE PALLETIZED UNITS, TO A MATING TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE, AS SHOWN IN THE LOADS ON PAGES 7 THROUGH 19. NOTE: IF THE LOAD IS POSITIONED AGAINST THE END WALL, AS SHOWN ON PAGE 10, ONLY ONE LONGITUDINAL RETAINING STRAP IS REQUIRED AT THE OPPOSITE END. IF THERE IS NOT ENOUGH ROOM BETWEEN LOAD AND SIDE WALL OF VEHICLE FOR THE STRAP RATCHET, HOOK THE RATCHET ENDS OF TWO WEB STRAP TIEDOWN ASSEMBLIES TOGETHER. POSITION THE RATCHETS AT THE END OF THE LOAD AND ATTACH THE NON-RATCHET HOOK END OF EACH STRAP TO A TIEDOWN ANCHOR ON EACH SIDE OF THE VEHICLE. MAKE SURE THERE IS A MINIMUM OF ONE-AND ONE-HALF WRAPS OF STRAP ON ONE RATCHET, THEN TAKE UP EXCESS SLACK IN REMAINING RATCHET AND RATCHET TIGHT. THIS METHOD REQUIRES TWO WEB STRAP TIEDOWN ASSEMBLIES IN LIEU OF ONE AT EACH LOCATION WHERE A LONGITUDINAL RETAINING STRAP IS REQUIRED. WHEN TWO WEB STRAPS ARE HOOKED TOGETHER IT MAY BE NECESSARY TO POSITION THE RATCHETS UP ON THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS, AS SHOWN IN THE LOAD ON PAGE 13, TO PROVIDE MORE ROOM FOR RATCHETING. IF A LOAD FILLS THE CARGO AREA OF A VEHICLE WITH ONLY SIX INCHES OR LESS SPACE REMAINING BETWEEN THE REAR OF THE LOAD AND THE REAR WALL OF THE VEHICLE AS SHOWN IN THE LOAD ON PAGE 12, NO LONGITUDINAL RETAINING STRAP IS REQUIRED.
7. THE M871 SEMITRAILER IS EQUIPPED WITH THREE DIFFERENT TYPES OF TIEDOWN FITTINGS AS INDICATED ON PAGE 18. 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 IT INTO POSITION (NOTE THAT THIS REMOVABLE TIEDOWN FITTING IS ALSO USED ON THE M872 SEMITRAILER). THERE ARE TEN LOCATIONS FOR THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M871 SEMITRAILER. TYPE II IS A REMOVABLE 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 LOCATIONS FOR THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M871 SEMITRAILER. TYPE III IS A FIXED TIEDOWN FITTING THAT HAS ONE RING AND IS RECESSED INTO THE FLOOR. THERE ARE FIVE OF THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M871 SEMITRAILER. NO TYPE I TIEDOWN FITTINGS ARE REQUIRED FOR THE LOADS SHOWN ON PAGE 18. HOWEVER, TYPE I TIEDOWN FITTINGS MAY BE USED, IF AVAILABLE, WHEN THERE IS AN INSUFFICIENT QUANTITY OF TYPE II TIEDOWN FITTINGS TO SECURE THE LOAD. SEE "TIEDOWN ANCHOR DETAILS" ON PAGE 36.
8. THE M872 SEMITRAILER IS EQUIPPED WITH TWO DIFFERENT TYPES OF TIEDOWN FITTINGS AS INDICATED ON PAGE 19. 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 IT INTO POSITION (NOTE THAT THIS REMOVABLE TIEDOWN FITTING MAY ALSO BE USED ON THE M871 SEMITRAILER). THERE ARE TWENTY-EIGHT LOCATIONS FOR THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M872 SEMITRAILER. HOWEVER, THE QUANTITY AND LOCATION MAY VARY ON SOME M872 SEMITRAILERS. THE SECOND TYPE OF TIEDOWN FITTING IS THE "TEE-HOOK". THIS IS A REMOVABLE 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 LOCATIONS FOR THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M872 SEMITRAILER. HOWEVER, THE QUANTITY AND LOCATION MAY VARY ON SOME M872 SEMITRAILERS. ASSURE THAT THE TIEDOWN FITTING IS FIRMLY SEATED AND ROTATED APPROXIMATELY 45° TO ENGAGED POSITION BEFORE ATTACHING THE WEB STRAP TIEDOWN ASSEMBLY. SEE "TIEDOWN ANCHOR DETAILS" ON PAGE 36.
9. WHEN LOADING SEMITRAILERS POSITION THE PALLETIZED PROPELLING CHARGE CONTAINERS IN SUCH A MANNER THAT THE WEIGHT IS DISTRIBUTED ON THE "KING-PIN" AND/OR THE "REAR AXLES". DO NOT POSITION PALLETIZED UNITS WITHIN FIVE FEET OF THE AFT END OF THE SEMITRAILER, IF POSSIBLE, AS THIS IS THE ROUGHEST RIDING AREA ON THE SEMITRAILER DUE TO REAR DECK OVERHANG.
10. IF A SEMITRAILER, STAKE, 12-TON, M127, IS TO BE USED, AND IT IS NOT EQUIPPED WITH TIEDOWN ANCHORS, SEE GENERAL NOTE "C" ON PAGE 2 AND NOTE "D" ON PAGE 36.
11. THE PROCEDURES SHOWN ON PAGES 17 THROUGH 19 ARE FOR USE ON SEMITRAILERS HAVING REMOVABLE SIDE RACKS/PANELS, AND/OR SEMITRAILERS THAT HAVE BEEN MODIFIED WITH "DROP-SIDES".

( CONTINUED AT RIGHT )

PALLETIZED 155MM PROPELLING CHARGES PACKED IN THE M13 SERIES CONTAINER.



ISOMETRIC VIEW

**KEY NUMBERS**

- ① WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 5 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY (1 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE WALL OF VEHICLE, AROUND END OF PALLET (5), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.

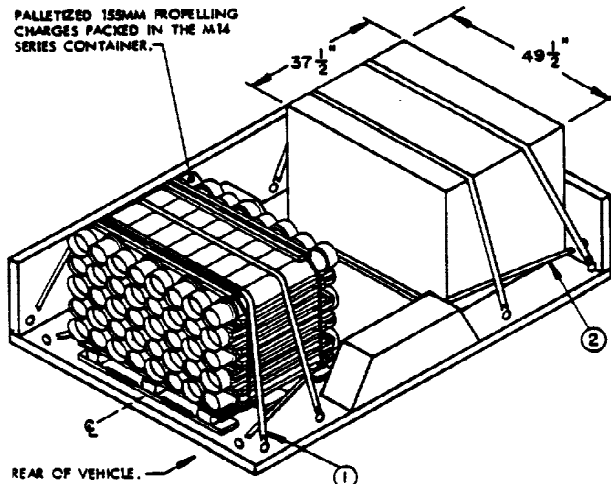
**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF ONE PALLET OF PROPELLING CHARGE CONTAINERS IS SHOWN IN A TRAILER, AMMUNITION, 1-1/2-TON, M332, HAVING INSIDE DIMENSIONS OF 60-1/2" LONG BY 55-3/8" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS OF THE PALLETIZED UNIT SHOWN.
2. THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY, AND VEHICLES OF OTHER DIMENSIONS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN ANCHORS LOCATED ON THE SIDEWALL, ENDWALL, OR FLOOR, MAY BE USED TO TRANSPORT THE LOAD SHOWN.
3. A PALLETIZED UNIT OF 155MM PROPELLING CHARGES PACKED IN THE M13 SERIES CONTAINER, HAVING DIMENSIONS OF 55" WIDE BY 41-1/2" LONG BY 48-7/8", IS SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS AND DIMENSIONS, FOLLOW THESE SAME PROCEDURES. SEE "LOADING TIEDOWN AND UNLOADING PROCEDURES" NOTES 6 AND 7 ON PAGE 5, AND SPECIAL NOTE 4 ON PAGE 6, FOR GUIDANCE ON SECURING WIDE LOADS.
4. IF DESIRED, THE PALLETIZED UNIT MAY BE POSITIONED AGAINST THE REAR WALL OF THE TRAILER AND/OR VEHICLE.
5. A TOTAL OF THREE WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 6 ON PAGE 5

**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNIT	1	1,751 LBS

PALLETIZED 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER.



ISOMETRIC VIEW

KEY NUMBERS

- ① WEB STRAP TIEDOWN ASSEMBLY (4 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT (S), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 3 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON END WALL OF VEHICLE, AROUND END OF PALLET (S), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.

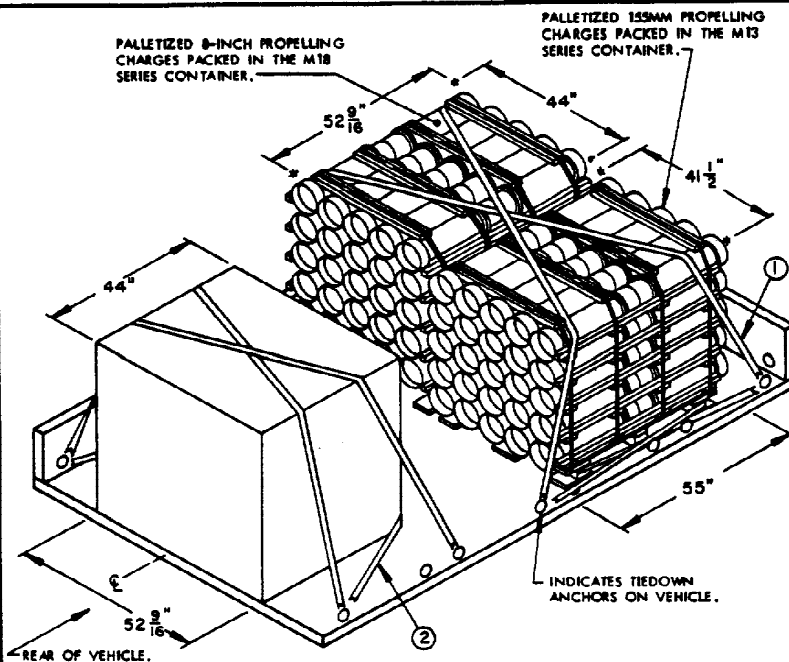
LOAD GUIDANCE NOTES:

1. A MAXIMUM LOAD OF TWO PALLETES OF PROPELLING CHARGE CONTAINERS IS SHOWN IN A TRAILER, CARGO, 1-1/2-TON, M108, HAVING INSIDE DIMENSIONS OF 110" LONG BY 74" 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, 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. TWO PALLETIZED UNITS OF 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER, HAVING DIMENSIONS OF 49-1/2" WIDE BY 37-1/2" LONG BY 36" HIGH, ARE SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTES 6 AND 7 ON PAGE 5, AND SPECIAL NOTE 4 ON PAGE 6.
4. A TOTAL OF SIX WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 6 ON PAGE 5 FOR GUIDANCE ON SECURING WIDE LOADS.

LOAD AS SHOWN

<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
PALLETIZED UNITS	2	2,612 LBS





**ISOMETRIC VIEW**

**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF THREE PALLETS OF PROPELLING CHARGE CONTAINERS IS SHOWN IN A TRUCK, CARGO, 2-1/2- TON, M35 AND/OR M211, HAVING INSIDE DIMENSIONS OF 142" LONG BY 88" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE WEIGHT OF THE PALLETTIZED 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 PALLETTIZED UNIT OF 133MM PROPELLING CHARGES PACKED IN THE M13 SERIES CONTAINER, HAVING DIMENSIONS OF 55" WIDE BY 41-1/2" LONG BY 45-7/8" HIGH, AND TWO PALLETTIZED UNITS OF 8-INCH PROPELLING CHARGES PACKED IN THE M18 SERIES CONTAINER, HAVING DIMENSIONS OF 52-9/16" WIDE BY 44" LONG BY 49" HIGH, ARE SHOWN IN THE LOAD ABOVE. IF LOADING PALLETTIZED UNITS OF OTHER ITEMS, SIZES OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
4. PALLETTIZED UNITS HAVING A LENGTH OF 44" OR GREATER CANNOT BE POSITIONED TWO WIDE IN AN 88" WIDE CARGO TRUCK. IN ORDER TO ACHIEVE A MAXIMUM LOAD A PALLETTIZED UNIT HAVING A LENGTH OF 43" OR LESS MAY BE POSITIONED Laterally ADJACENT TO A PALLETTIZED UNIT HAVING A LENGTH OF 44", AS SHOWN AT THE FORWARD END OF THE VEHICLE ABOVE, OR THE PALLETTIZED UNITS HAVING A LENGTH OF 44" OR GREATER MAY BE POSITIONED ONE WIDE, LONGITUDINALLY ADJACENT TO EACH OTHER, DOWN THE CENTER OF THE VEHICLE, AS SHOWN AT THE REAR OF THE VEHICLE ABOVE AND/OR IN THE LOAD ON PAGE 10. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTES 6 AND 7 ON PAGE 5, FOR GUIDANCE ON SECURING WIDE LOADS.
5. A TOTAL OF SEVEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 6 ON PAGE 5.
6. STRAPS MARKED ①, POSITIONED OVER TOP OF THE TWO Laterally ADJACENT PALLETTIZED UNITS AT THE FORWARD END OF THE VEHICLE IN THE LOAD ABOVE, ARE ATTACHED TO TIEDOWN ANCHORS ON THE SIDE OF THE VEHICLE THAT ARE LOCATED FAR ENOUGH APART TO ALLOW ATTACHMENT OF THE STRAP RATCHET AND PROVIDE ROOM TO "WORK" THE RATCHET. SEE "LOADING, TIEDOWN AND UNLOADING PROCEDURE", NOTE 6C ON PAGE 5.

**KEY NUMBERS**

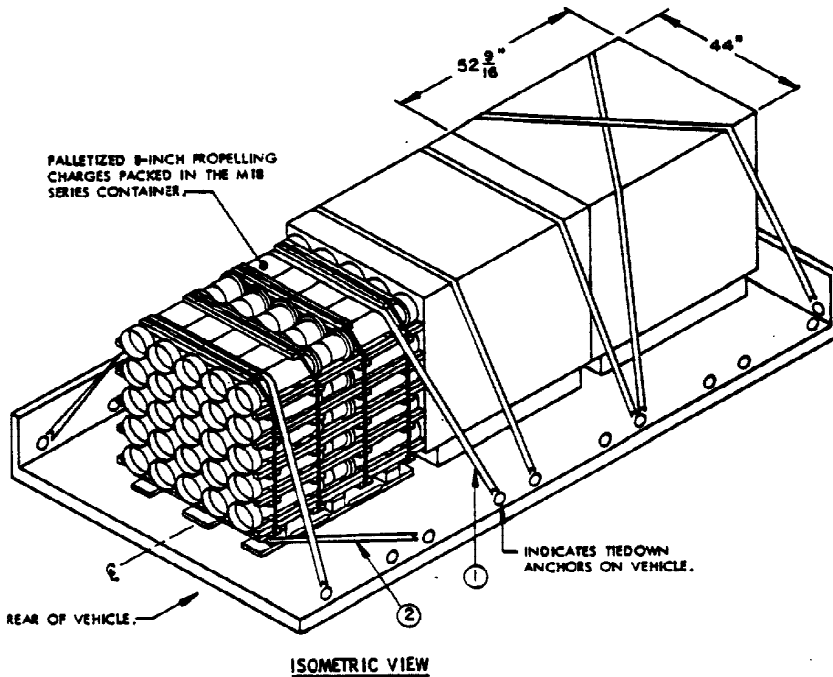
- ① WEB STRAP TIEDOWN ASSEMBLY ( 4 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETTIZED UNIT ( 5 ), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 3 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY ( 3 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE WALL OF VEHICLE, AROUND END OF PALLET ( 5 ), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE, TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.

**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT ( APPROX )
PALLETTIZED UNITS	3	5,349 LBS

**KEY NUMBERS**

- ① WEB STRAP TIEDOWN ASSEMBLY ( 6 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT ( S ), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 5 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY ( 1 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE WALL OF VEHICLE, AROUND END OF PALLET ( S ), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.



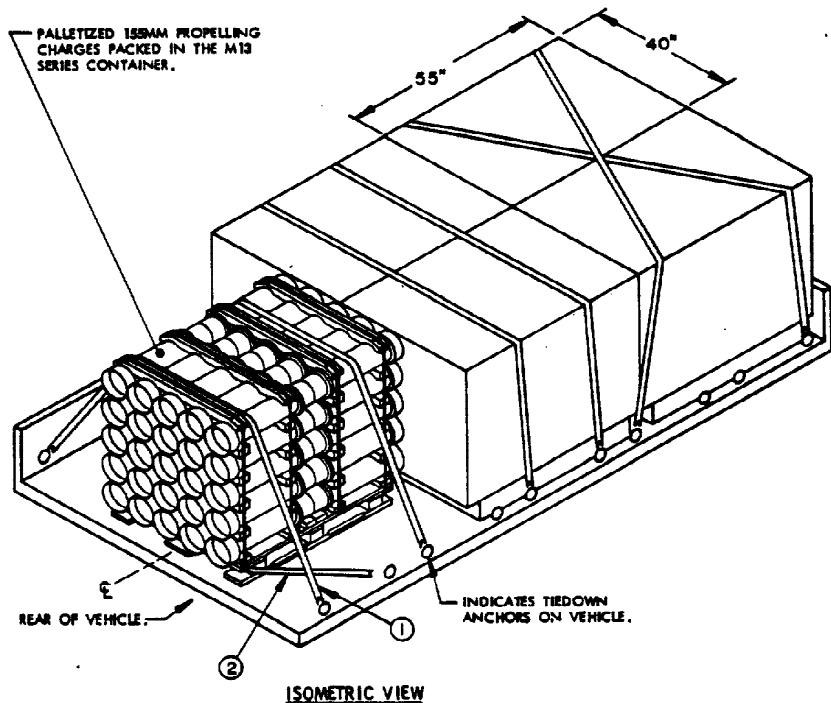
**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF THREE PALLETES OF PROPELLING CHARGE CONTAINERS IS SHOWN IN A TRUCK, CARGO, 5-TON, M54, HAVING INSIDE DIMENSIONS OF 168" LONG BY 88" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS 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. THREE PALLETIZED UNITS OF 8-INCH PROPELLING CHARGES PACKED IN THE M18 SERIES CONTAINER, HAVING DIMENSIONS OF 52-9/16" WIDE BY 44" LONG BY 49" HIGH, ARE SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
4. PALLETIZED UNITS HAVING A LENGTH OF 44" OR GREATER CANNOT BE POSITIONED TWO WIDE IN AN 88" WIDE CARGO TRUCK. IF DESIRED THE PALLETIZED UNITS MAY BE POSITIONED WITH THE PALLETIZED UNIT LENGTH PARALLEL TO THE SIDES OF THE VEHICLE IN LIEU OF THE WIDTH AS SHOWN ABOVE. THESE PROCEDURES MAY BE USED WHEN LOADING PALLETIZED UNITS OF OTHER DIMENSIONS, OR IF THE PALLETIZED UNITS BEING LOADED ARE LESS THAN 44" IN LENGTH USE THE PROCEDURES SHOWN ON PAGES 11 THROUGH 13. SEE SPECIAL NOTE 4 ON PAGE 6.
5. A TOTAL OF SEVEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE.

<b>LOAD AS SHOWN</b>		
<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT ( APPROX )</u>
PALLETIZED UNITS	3	5,337 LBS

**KEY NUMBERS**

- ① WEB STRAP TIEDOWN ASSEMBLY (6 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT (5), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 5 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY (1 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDEWALL OF VEHICLE, AROUND END OF PALLET (5), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.



**ISOMETRIC VIEW**

**LOAD GUIDANCE NOTES:**

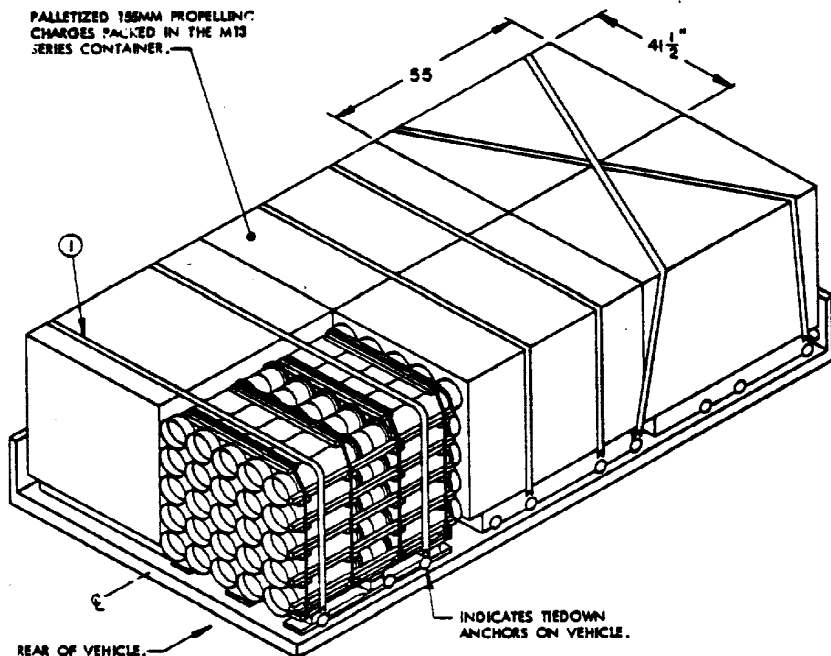
1. A MAXIMUM LOAD OF FIVE PALLETIZED UNITS OF 125MM PROPELLING CHARGE CONTAINERS IS SHOWN IN A TRUCK, CARGO, 5-TON, M54, HAVING INSIDE DIMENSIONS OF 168" LONG BY 88" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE WEIGHT OF THE PALLETIZED UNIT SHOWN.
2. THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY, AND 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. FIVE PALLETIZED UNITS OF 125MM PROPELLING CHARGES PACKED IN THE M13 SERIES CONTAINER, HAVING DIMENSIONS OF 55" WIDE BY 40" LONG BY 44-7/8" HIGH, ARE SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
4. PALLETIZED UNITS HAVING A LENGTH LESS THAN 44" CAN BE POSITIONED TWO WIDE IN AN 88" WIDE CARGO TRUCK, AS SHOWN ABOVE. HOWEVER, IF THE SPACE BETWEEN THE LOAD AND THE VEHICLE SIDE WALL IS LESS THAN 12" IT WILL BE DIFFICULT TO INSTALL AND OPERATE THE RATCHET ON THE WEB STRAP TIEDOWN ASSEMBLY. SEE THE LOAD SHOWN ON PAGE 13 FOR AN ALTERNATIVE METHOD OF LOADING AND SECURING WIDE LOAD IN CARGO TRUCKS. ALSO SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTES 6 AND 7 ON PAGE 5, AND SPECIAL NOTE 4 ON PAGE 6, FOR GUIDANCE ON SECURING WIDE LOADS.
5. THE PALLETIZED UNIT POSITIONED AT THE REAR OF THE LOAD MAY BE POSITIONED WITH THE PALLETIZED UNIT LENGTH PARALLEL TO THE VEHICLE SIDE WALLS IN LIEU OF THE PALLETIZED UNIT WIDTH AS SHOWN IN THE LOAD ABOVE, IF DESIRED.
6. A TOTAL OF SEVEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 6 ON PAGE 5.

**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNITS	5	8,830 LBS

**KEY NUMBER**

- ① WEB STRAP TIEDOWN ASSEMBLY (6 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT (5), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 5 ON PAGE 6.



**ISOMETRIC VIEW**

**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF SIX PALLETIZED UNITS OF PROPELLING CHARGE CONTAINERS IS SHOWN IN A TRUCK, CARGO, 5-TON, M54, HAVING INSIDE DIMENSIONS OF 168" LONG BY 88" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE WEIGHT OF THE PALLETIZED UNIT SHOWN, AND THE SIZE.
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. SIX PALLETIZED UNITS OF 158MM PROPELLING CHARGES PALLETIZED IN THE M13 SERIES CONTAINER, HAVING DIMENSIONS OF 55" WIDE BY 41-1/2" LONG BY 45-7/8" HIGH, ARE SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
4. PALLETIZED UNITS HAVING A LENGTH LESS THAN 44" CAN BE POSITIONED TWO WIDE IN AN 88" WIDE CARGO TRUCK, AS SHOWN ABOVE. HOWEVER, IF THE SPACE BETWEEN THE LOAD AND THE VEHICLE SIDE WALL IS LESS THAN 12" IT WILL BE DIFFICULT TO INSTALL AND OPERATE THE RATCHET ON THE WEB STRAP TIEDOWN ASSEMBLY. SEE THE LOAD SHOWN ON PAGE 13 FOR AN ALTERNATIVE METHOD OF LOADING AND SECURING WIDE LOADS IN CARGO TRUCKS. ALSO SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTES 6 AND 7 ON PAGE 5, FOR GUIDANCE ON SECURING WIDE LOADS.
5. A TOTAL OF SIX WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 6 ON PAGE 5.
6. IF A LOAD FILLS THE CARGO AREA OF A VEHICLE WITH ONLY SIX INCHES OR LESS SPACE REMAINING BETWEEN THE REAR OF THE LOAD AND THE REAR WALL (TAILGATE) OF THE VEHICLE, AS SHOWN IN THE LOAD ABOVE, NO LONGITUDINAL RETAINING STRAP IS REQUIRED. SEE SPECIAL NOTE 6 ON PAGE 6.

**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNITS	6	9,606 LBS

**SPECIAL NOTES:**

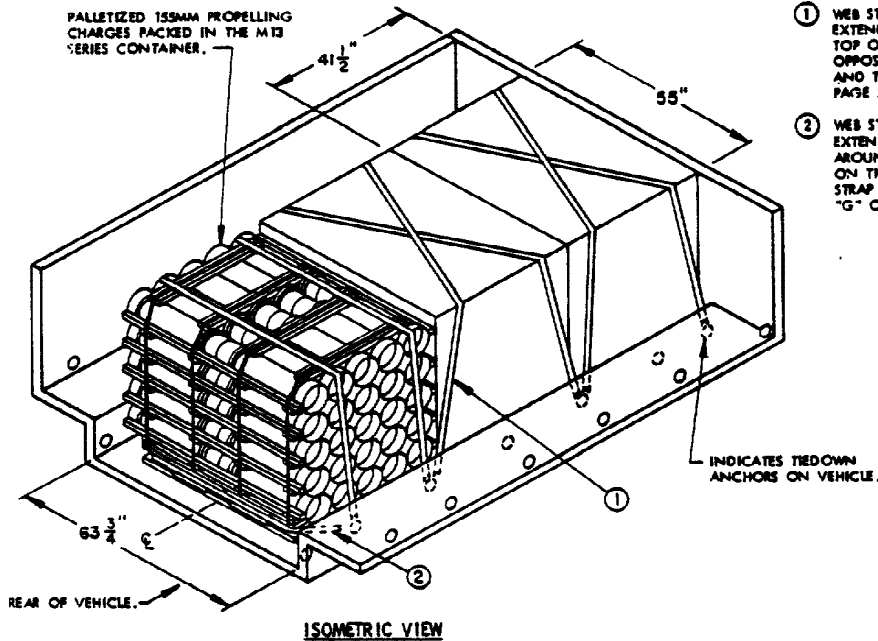
( SPECIAL NOTES CONTINUED )

1. THE LOADS SHOWN ON PAGES 7 THROUGH 19 ARE BASED ON TESTED METHODS OF SECURING PALLETIZED PROPELLING CHARGE CONTAINERS IN/ON TACTICAL VEHICLES. THE PROCEDURES SHOWN CAN BE USED IN/ON CARGO TRUCKS SUCH AS THE M54, 3-TON, AND CARGO TRAILERS SUCH AS THE M105, 1-1/2-TON, HAVING TIEDOWN ANCHORS LOCATED IN THE SIDE WALLS AND END WALLS. ALSO, THE PROCEDURES SHOWN CAN BE USED ON SEMITRAILERS SUCH AS THE M871, 22-1/2-TON, AND CARGO TRUCK, SUCH AS THE M977, 10-TON, HEMTT, HAVING TIEDOWN ANCHORS LOCATED ON THE FLOOR. NOTE: IF LOADING A "HEMTT" ALSO SEE THE SPECIAL HEMTT LOADING SECTION ON PAGES 26 THROUGH 28.
2. THE TACTICAL VEHICLES SHOWN ARE TYPICAL ONLY AND OTHER TYPES OF VEHICLES MAY BE USED IN LIEU OF THOSE SHOWN AS LONG AS THEY COMPLY WITH GENERAL NOTE "C" ON PAGE 2.
3. MAXIMUM LOADS ARE SHOWN. HOWEVER, LESSER QUANTITIES MAY BE LOADED AND SECURED USING THE DEPICTED PROCEDURES.
4. PRIOR TO LOADING A TACTICAL VEHICLE, SELECT THE QUANTITY OF PALLETIZED UNITS TO BE LOADED. DO NOT EXCEED THE OFF-HIGHWAY WEIGHT LIMIT OF THE VEHICLE. SELECT A LOCATION AGAINST AN END WALL OR WITHIN THE LENGTH OF THE CARGO BED THAT WILL PROVIDE ADEQUATE TIEDOWN ANCHORS TO SECURE THE LOAD, USING THE TIEDOWN PROCEDURES DEPICTED ON PAGES 17 THROUGH 19 AS GUIDANCE. NOTE: WHEN POSSIBLE, ALWAYS POSITION THE PALLETIZED UNIT (S) AGAINST THE FORWARD END WALL OF THE VEHICLE.
5. EACH SINGLE PALLETIZED UNIT AND/OR TWO ADJACENT PALLETIZED UNITS POSITIONED ACROSS THE WIDTH OF THE VEHICLE, AS SHOWN ON PAGES 7 THROUGH 19 MUST BE SECURED WITH TWO STRAPS ATTACHED TO TIEDOWN ANCHORS ON ONE SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT (S), TO MATING TIEDOWN ANCHORS ON OPPOSITE SIDE OF VEHICLE. NOTE: DO NOT POSITION THESE STRAPS ACROSS LOAD ON LONGITUDINAL JOINTS BETWEEN PALLETIZED UNITS. IF THE TIEDOWN ANCHORS ON SIDE OF VEHICLE ARE TOO CLOSE TOGETHER, TOO FAR APART, OR ARE NOT IN A LOCATION WHICH WILL ALLOW ADEQUATE HOLD DOWN OF PALLETIZED UNIT (S) WHEN STRAPS ARE POSITIONED STRAIGHT OVER TOP OF LOAD, THE TWO HOLD DOWN STRAPS MAY BE CROSSED OVER THE TOP OF THE PALLETIZED UNIT (S), AS SHOWN IN THE LOAD ON PAGE 9.
6. ALL LOADS FROM ONE PALLETIZED UNIT TO A MAXIMUM LOAD OF PALLETIZED UNITS MUST BE SECURED LONGITUDINALLY WITH ONE STRAP AT EACH END, ATTACHED TO A TIEDOWN ANCHOR ON ONE SIDE OF THE VEHICLE AND POSITIONED AROUND THE END (S) OF THE PALLETIZED UNITS, TO A MATING TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE, AS SHOWN IN THE LOADS ON PAGES 7 THROUGH 19. NOTE: IF THE LOAD IS POSITIONED AGAINST THE END WALL, AS SHOWN ON PAGE 10, ONLY ONE LONGITUDINAL RETAINING STRAP IS REQUIRED AT THE OPPOSITE END. IF THERE IS NOT ENOUGH ROOM BETWEEN LOAD AND SIDE WALL OF VEHICLE FOR THE STRAP RATCHET, HOOK THE RATCHET ENDS OF TWO WEB STRAP TIEDOWN ASSEMBLIES TOGETHER. POSITION THE RATCHETS AT THE END OF THE LOAD AND ATTACH THE NON-RATCHET HOOK END OF EACH STRAP TO A TIEDOWN ANCHOR ON EACH SIDE OF THE VEHICLE. MAKE SURE THERE IS A MINIMUM OF ONE-AND ONE-HALF WRAPS OF STRAP ON ONE RATCHET, THEN TAKE UP EXCESS SLACK IN REMAINING RATCHET AND RATCHET TIGHT. THIS METHOD REQUIRES TWO WEB STRAP TIEDOWN ASSEMBLIES IN LIEU OF ONE AT EACH LOCATION WHERE A LONGITUDINAL RETAINING STRAP IS REQUIRED. WHEN TWO WEB STRAPS ARE HOOKED TOGETHER IT MAY BE NECESSARY TO POSITION THE RATCHETS UP ON THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS, AS SHOWN IN THE LOAD ON PAGE 13, TO PROVIDE MORE ROOM FOR RATCHETING. IF A LOAD FILLS THE CARGO AREA OF A VEHICLE WITH ONLY SIX INCHES OR LESS SPACE REMAINING BETWEEN THE REAR OF THE LOAD AND THE REAR WALL OF THE VEHICLE AS SHOWN IN THE LOAD ON PAGE 12, NO LONGITUDINAL RETAINING STRAP IS REQUIRED.
7. THE M871 SEMITRAILER IS EQUIPPED WITH THREE DIFFERENT TYPES OF TIEDOWN FITTINGS AS INDICATED ON PAGE 18. 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 IT INTO POSITION (NOTE THAT THIS REMOVABLE TIEDOWN FITTING IS ALSO USED ON THE M872 SEMITRAILER). THERE ARE TEN LOCATIONS FOR THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M871 SEMITRAILER. TYPE II IS A REMOVABLE 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 LOCATIONS FOR THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M871 SEMITRAILER. TYPE III IS A FIXED TIEDOWN FITTING THAT HAS ONE RING AND IS RECESSED INTO THE FLOOR. THERE ARE FIVE OF THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M871 SEMITRAILER. NO TYPE I TIEDOWN FITTINGS ARE REQUIRED FOR THE LOADS SHOWN ON PAGE 18. HOWEVER, TYPE I TIEDOWN FITTINGS MAY BE USED, IF AVAILABLE, WHEN THERE IS AN INSUFFICIENT QUANTITY OF TYPE II TIEDOWN FITTINGS TO SECURE THE LOAD. SEE "TIEDOWN ANCHOR DETAILS" ON PAGE 36.
8. THE M872 SEMITRAILER IS EQUIPPED WITH TWO DIFFERENT TYPES OF TIEDOWN FITTINGS AS INDICATED ON PAGE 19. 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 IT INTO POSITION (NOTE THAT THIS REMOVABLE TIEDOWN FITTING MAY ALSO BE USED ON THE M871 SEMITRAILER). THERE ARE TWENTY-EIGHT LOCATIONS FOR THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M872 SEMITRAILER. HOWEVER, THE QUANTITY AND LOCATION MAY VARY ON SOME M872 SEMITRAILERS. THE SECOND TYPE OF TIEDOWN FITTING IS THE "TEE-HOOK". THIS IS A REMOVABLE 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 LOCATIONS FOR THESE TIEDOWN FITTINGS ON EACH SIDE OF THE M872 SEMITRAILER. HOWEVER, THE QUANTITY AND LOCATION MAY VARY ON SOME M872 SEMITRAILERS. ASSURE THAT THE TIEDOWN FITTING IS FIRMLY SEATED AND ROTATED APPROXIMATELY 45° TO ENGAGED POSITION BEFORE ATTACHING THE WEB STRAP TIEDOWN ASSEMBLY. SEE "TIEDOWN ANCHOR DETAILS" ON PAGE 36.
9. WHEN LOADING SEMITRAILERS POSITION THE PALLETIZED PROPELLING CHARGE CONTAINERS IN SUCH A MANNER THAT THE WEIGHT IS DISTRIBUTED ON THE "KING-PIN" AND/OR THE "REAR AXLES". DO NOT POSITION PALLETIZED UNITS WITHIN FIVE FEET OF THE AFT END OF THE SEMITRAILER, IF POSSIBLE, AS THIS IS THE ROUGHEST RIDING AREA ON THE SEMITRAILER DUE TO REAR DECK OVERHANG.
10. IF A SEMITRAILER, STAKE, 12-TON, M127, IS TO BE USED, AND IT IS NOT EQUIPPED WITH TIEDOWN ANCHORS, SEE GENERAL NOTE "C" ON PAGE 2 AND NOTE "D" ON PAGE 36.
11. THE PROCEDURES SHOWN ON PAGES 17 THROUGH 19 ARE FOR USE ON SEMITRAILERS HAVING REMOVABLE SIDE RACKS/PANELS, AND/OR SEMITRAILERS THAT HAVE BEEN MODIFIED WITH "DROP-SIDES".

( CONTINUED AT RIGHT )

**KEY NUMBERS**

- ① WEB STRAP TIEDOWN ASSEMBLY (6 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT (5), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 5 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY (1 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE WALL OF VEHICLE, AROUND END OF PALLET (5), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.



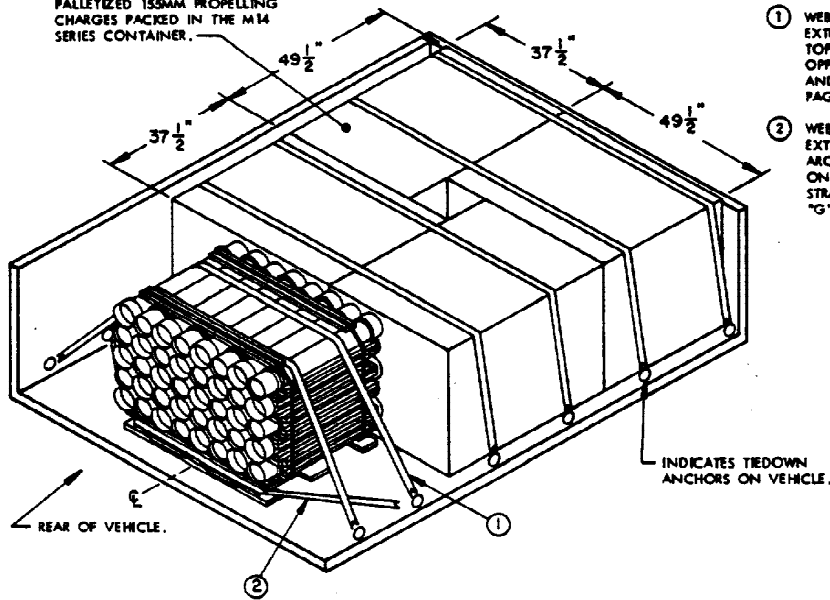
**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF THREE PALLETIZED UNITS OF PROPELLING CHARGE CONTAINERS IS SHOWN IN A CARRIER, CARGO, TRACKED, 6-TON, M548 (DECK DOWN), HAVING INSIDE DIMENSIONS OF 130-5/8" LONG BY 96-1/2" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS 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. THREE PALLETIZED UNITS OF 155MM PROPELLING CHARGES PACKED IN THE M13 SERIES CONTAINER, HAVING DIMENSIONS OF 55" WIDE BY 41-1/2" LONG BY 45-7/8" HIGH, ARE SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES. SEE SPECIAL NOTE 4 ON PAGE 6.
4. WHEN LOADING A CARRIER WITH THE DECK IN THE UP POSITION A TOTAL OF FOUR PALLETIZED UNITS, AS SHOWN ABOVE, CAN BE LOADED BY POSITIONING THE PALLETIZED UNITS WITH THE 41-1/2" WIDTH DIMENSION ACROSS THE CARRIER WIDTH, TWO WIDE AND TWO LONG. IF SMALLER SIZE PALLETIZED UNITS ARE TO BE LOADED SEE THE LOAD ON PAGE 15 FOR AN ALTERNATIVE METHOD.
5. A TOTAL OF SEVEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 6 ON PAGE 5.

**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNITS	3	5,238 LBS

PALLETIZED 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER.



ISOMETRIC VIEW

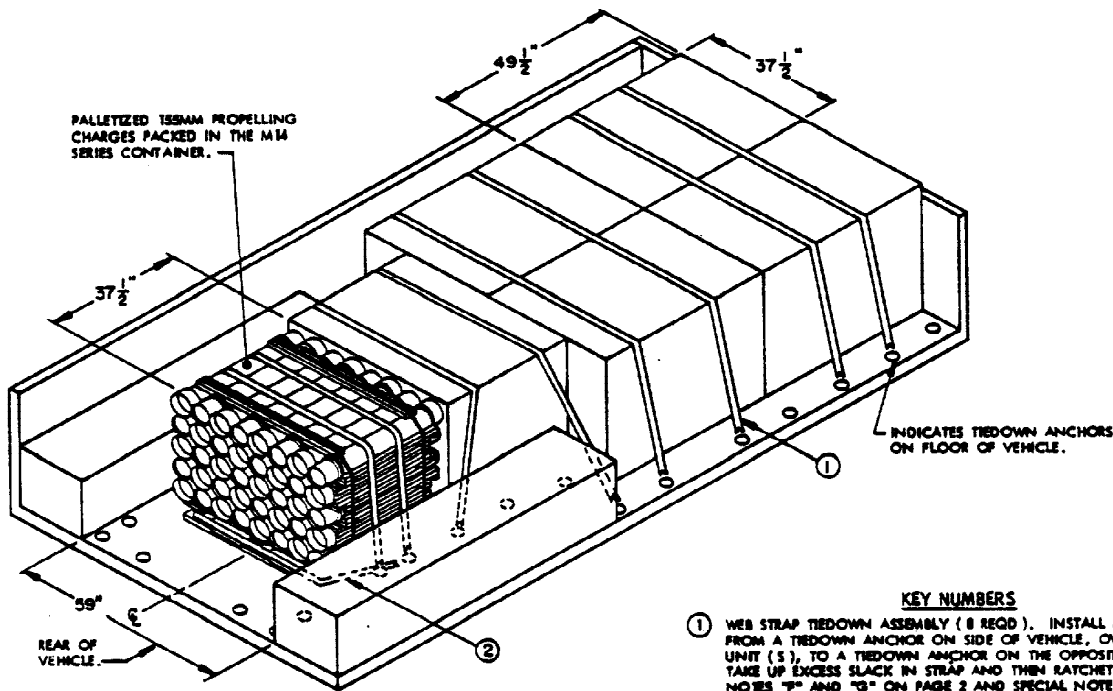
KEY NUMBERS

- ① WEB STRAP TIEDOWN ASSEMBLY (6 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT (5), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 5 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY (1 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE WALL OF VEHICLE, AROUND END OF PALLET (5), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE, TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.

LOAD GUIDANCE NOTES:

1. A MAXIMUM LOAD OF FIVE PALLETIZED UNITS OF PROPELLING CHARGE CONTAINERS IS SHOWN IN A CARRIER, CARGO, TRACKED, 6-TON, M548 (DECK UP), HAVING INSIDE DIMENSIONS OF 130-5/8" LONG BY 96-1/2" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS 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. FIVE PALLETIZED UNITS OF 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER, HAVING DIMENSIONS OF 49-1/2" WIDE BY 37-1/2" LONG BY 36" HIGH, ARE SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
4. DEPENDING ON THE DIMENSIONS OF THE PALLETIZED UNIT BEING LOADED IT MAY BE ADVANTAGEOUS TO POSITION FOUR PALLETIZED UNITS INTO A "CHIMNEY PATTERN" AS SHOWN ABOVE. BY USING THIS METHOD, WHEN LOADING THE PALLETIZED UNIT SHOWN, ENOUGH SPACE IS GAINED TO POSITION ONE MORE PALLETIZED UNIT AT THE REAR OF THE LOAD. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTES 6 AND 7 ON PAGE 5, AND SPECIAL NOTE 4 ON PAGE 6, FOR GUIDANCE ON SECURING WIDE LOADS.
5. A TOTAL OF SEVEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 6 ON PAGE 5.

<u>LOAD AS SHOWN</u>		
<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
PALLETIZED UNITS	5	6,530 LBS



**ISOMETRIC VIEW**

**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF SIX PALLETIZED UNITS OF PROPELLING CHARGE CONTAINERS IS SHOWN IN A TRUCK, CARGO, 8-TON, M520, HAVING INSIDE DIMENSIONS OF 98" LONG BY 98" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS 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. SIX PALLETIZED UNITS OF 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER, HAVING DIMENSIONS OF 49-1/2" WIDE BY 37-1/2" LONG BY 36" HIGH, ARE SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTES 6 AND 7 ON PAGE 5 AND SPECIAL NOTE 4 ON PAGE 6, FOR GUIDANCE ON SECURING WIDE LOADS.
4. A TOTAL OF NINE WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 6 ON PAGE 5.

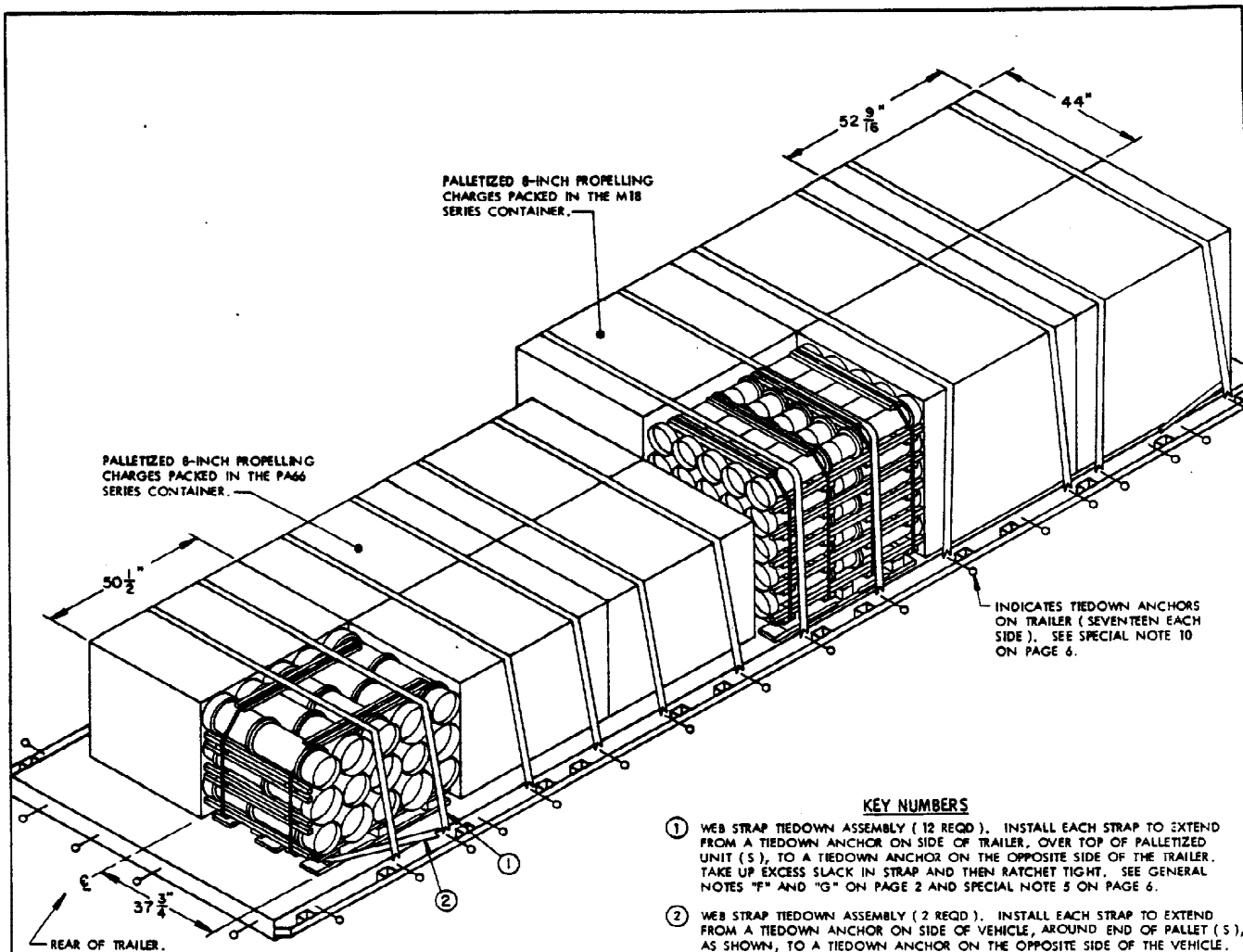
**KEY NUMBERS**

- 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 ( 5 ), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 5 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY ( 1 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, AROUND END OF PALLET ( 5 ), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.

**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT ( APPROX )
PALLETIZED UNITS	6	7,836 LBS





ISOMETRIC VIEW

**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF TWELVE PALLETIZED UNITS OF PROPELLING CHARGE CONTAINERS IS SHOWN ON A SEMITRAILER, STAKE, 12-TON, M127, HAVING DIMENSIONS OF 330" LONG BY 96" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS OF THE PALLETIZED UNITS SHOWN.
2. THE TRAILER SHOWN WAS SELECTED AS TYPICAL ONLY, AND TRAILERS OF OTHER DIMENSIONS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN ANCHORS LOCATED ALONG THE SIDE, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
3. SIX PALLETIZED UNITS OF 8-INCH PROPELLING CHARGES PACKED IN THE M18 SERIES CONTAINER, HAVING DIMENSIONS OF 52-9/16" WIDE BY 44" LONG BY 49" HIGH, AND SIX PALLETIZED UNITS OF 8-INCH PROPELLING CHARGES PACKED IN THE PA66 SERIES CONTAINER, HAVING DIMENSIONS OF 50-1/2" WIDE BY 37-3/4" LONG BY 35-5/8" HIGH, ARE SHOWN AS A TYPICAL MIXED ITEM LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
4. A TOTAL OF FOURTEEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 6 ON PAGE 5.
5. IF AN UNEVEN QUANTITY OF PALLETIZED UNITS ARE BEING LOADED, SUCH AS ELEVEN, POSITION ONE PALLETIZED UNIT IN THE CENTER OF THE TRAILER WIDTH AND TIGHT AGAINST THE REAR TWO LATERALLY ADJACENT PALLETIZED UNITS, AS SHOWN IN THE LOAD ON PAGE 11.

(CONTINUED AT RIGHT)

**KEY NUMBERS**

- ① WEB STRAP TIEDOWN ASSEMBLY (12 REQD.). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF TRAILER, OVER TOP OF PALLETIZED UNIT (5), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE TRAILER. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 5 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY (2 REQD.). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, AROUND END OF PALLET (5), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTE NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.

(LOAD GUIDANCE NOTES CONTINUED)

6. WHEN LOADING ONE PALLETIZED UNIT ON A TRAILER, POSITION THE PALLETIZED UNIT IN THE CENTER OF THE TRAILER WIDTH AND IN A LONGITUDINAL LOCATION THAT WILL ALLOW TWO STRAPS TO BE POSITIONED OVER TOP OF THE PALLETIZED UNIT AND ONE STRAP AROUND THE PALLET BASE AT EACH END. USE THE LOAD ON PAGE 10 FOR GUIDANCE.
7. IF IT IS DESIRABLE TO LOAD A ROW OF TWO OR MORE SINGLE PALLETIZED UNITS DOWN THE CENTER OF THE TRAILER LENGTH, USE THE LOAD ON PAGE 10 FOR GUIDANCE. NOTE: ONE ADDITIONAL STRAP MARKED ② WILL BE REQUIRED, AROUND THE BASE OF THE PALLET, AT THE FORWARD END OF THE LOAD.

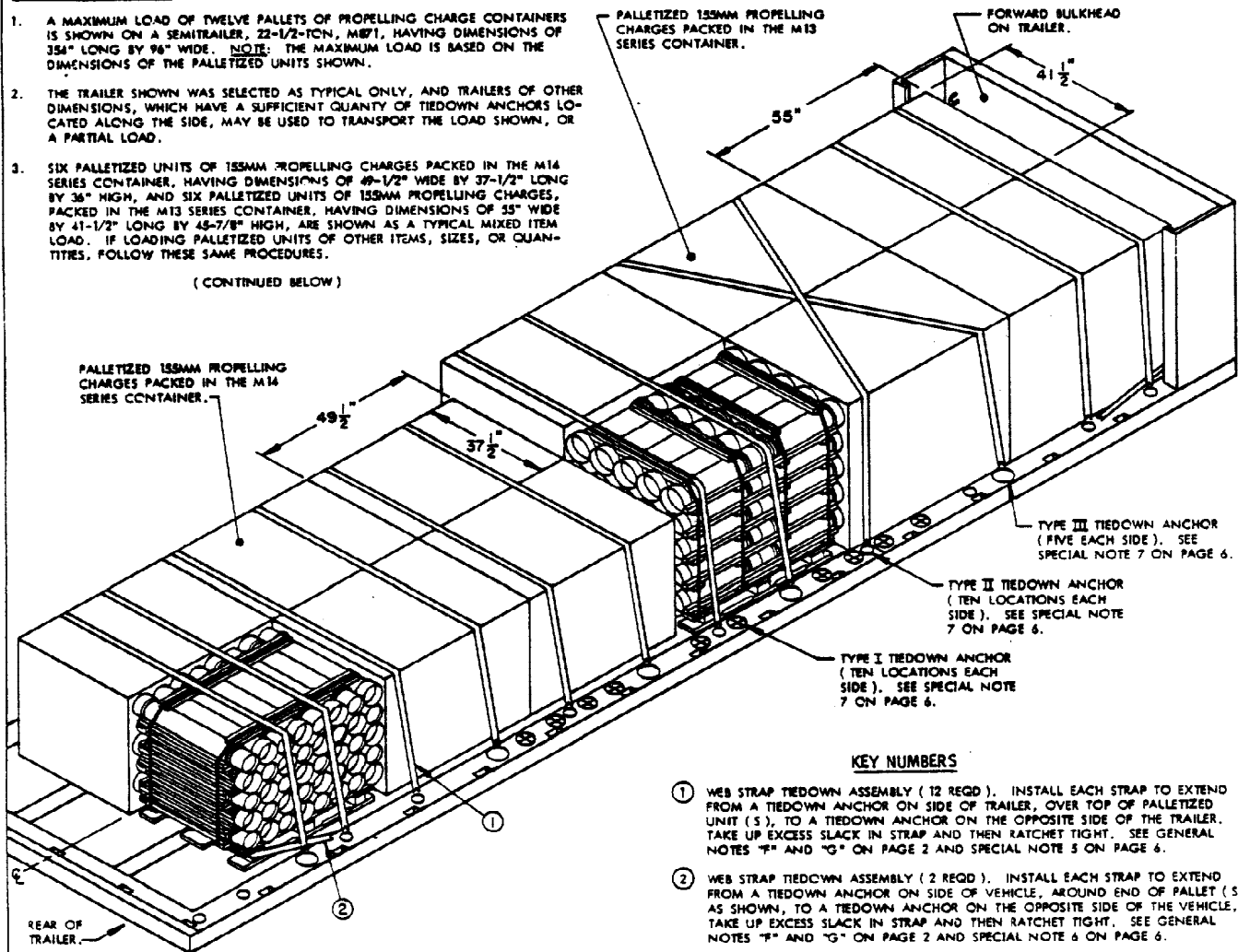
**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNITS	12	18,324 LBS

**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF TWELVE PALLETIZED UNITS OF PROPELLING CHARGE CONTAINERS IS SHOWN ON A SEMITRAILER, 22-1/2-TON, M871, HAVING DIMENSIONS OF 354" LONG BY 96" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS OF THE PALLETIZED UNITS SHOWN.
2. THE TRAILER SHOWN WAS SELECTED AS TYPICAL ONLY, AND TRAILERS OF OTHER DIMENSIONS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN ANCHORS LOCATED ALONG THE SIDE, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
3. SIX PALLETIZED UNITS OF 125MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER, HAVING DIMENSIONS OF 49-1/2" WIDE BY 37-1/2" LONG BY 36" HIGH, AND SIX PALLETIZED UNITS OF 125MM PROPELLING CHARGES, PACKED IN THE M13 SERIES CONTAINER, HAVING DIMENSIONS OF 35" WIDE BY 41-1/2" LONG BY 45-7/8" HIGH, ARE SHOWN AS A TYPICAL MIXED ITEM LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.

(CONTINUED BELOW)



**ISOMETRIC VIEW**

(LOAD GUIDANCE NOTES CONTINUED)

4. THIS TRAILER IS EQUIPPED WITH THREE DIFFERENT TYPES OF TIEDOWN ANCHORS AS INDICATED IN THE "ISOMETRIC VIEW" ON THIS PAGE. THE LOAD SHOWN ON THIS PAGE REQUIRES THE USE OF FOURTEEN TYPE II REMOVABLE TIEDOWN ANCHORS (SEVEN ON EACH SIDE OF THE TRAILER), AND TEN TYPE III FIXED TIEDOWN ANCHORS (FIVE ON EACH SIDE OF THE TRAILER). SEE SPECIAL NOTE 7 ON PAGE 6.
5. A TOTAL OF FOURTEEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 4 ON PAGE 5.
6. IF AN UNEVEN QUANTITY OF PALLETIZED UNITS ARE BEING LOADED, SUCH AS ELEVEN, POSITION ONE PALLETIZED UNIT IN THE CENTER OF THE TRAILER WIDTH AND TIGHT AGAINST THE REAR TWO LATERALLY ADJACENT PALLETIZED UNITS, AS SHOWN IN THE LOAD ON PAGE 11.
7. WHEN LOADING ONE PALLETIZED UNIT ON A TRAILER, POSITION THE PALLETIZED UNIT IN THE CENTER OF THE TRAILER WIDTH AND IN A LONGITUDINAL LOCATION THAT WILL ALLOW TWO STRAPS TO BE POSITIONED OVER TOP OF THE PALLETIZED UNIT AND ONE STRAP AROUND THE PALLET BASE AT EACH END. USE THE LOAD ON PAGE 10 FOR GUIDANCE.
8. IF IT IS DESIRABLE TO LOAD A ROW OF TWO OR MORE SINGLE PALLETIZED UNITS DOWN THE CENTER OF THE TRAILER LENGTH, USE THE LOAD ON PAGE 10 FOR GUIDANCE. NOTE: ONE ADDITIONAL STRAP MARKED ② WILL BE REQUIRED, AROUND THE BASE OF THE PALLET, AT THE FORWARD END OF THE LOAD.

**KEY NUMBERS**

- ① WEB STRAP TIEDOWN ASSEMBLY (12 REQD.). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF TRAILER, OVER TOP OF PALLETIZED UNIT (S), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE TRAILER. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 5 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY (2 REQD.). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, AROUND END OF PALLET (S), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.

**LOAD AS SHOWN**

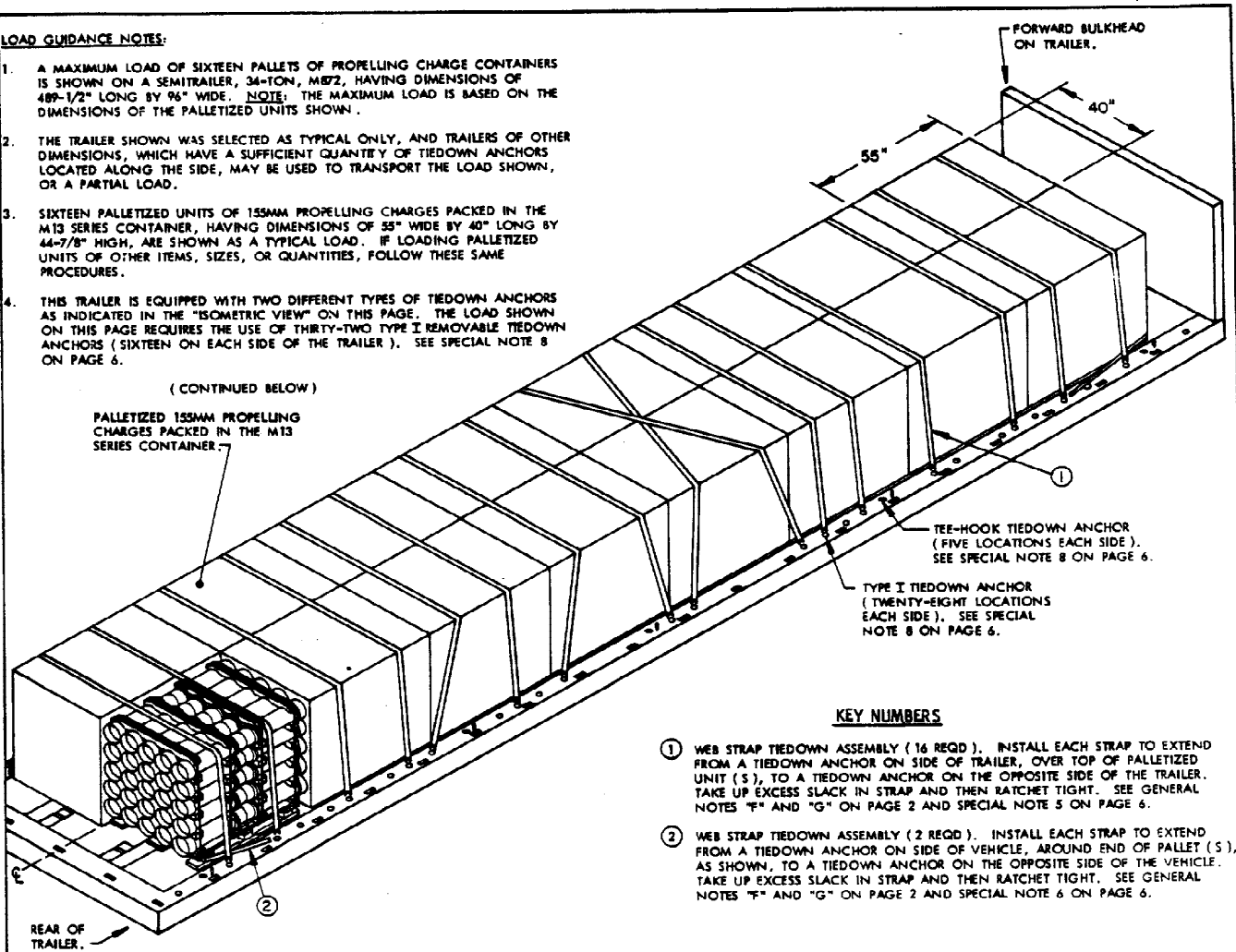
ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNITS	12	17,442 LBS

**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF SIXTEEN PALLETIZED UNITS OF PROPELLING CHARGE CONTAINERS IS SHOWN ON A SEMITRAILER, 34-TON, M872, HAVING DIMENSIONS OF 489-1/2" LONG BY 96" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS OF THE PALLETIZED UNITS SHOWN.
2. THE TRAILER SHOWN WAS SELECTED AS TYPICAL ONLY, AND TRAILERS OF OTHER DIMENSIONS, WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN ANCHORS LOCATED ALONG THE SIDE, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
3. SIXTEEN PALLETIZED UNITS OF 155MM PROPELLING CHARGES PACKED IN THE M13 SERIES CONTAINER, HAVING DIMENSIONS OF 55" WIDE BY 40" LONG BY 44-7/8" HIGH, ARE SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
4. THIS TRAILER IS EQUIPPED WITH TWO DIFFERENT TYPES OF TIEDOWN ANCHORS AS INDICATED IN THE "ISOMETRIC VIEW" ON THIS PAGE. THE LOAD SHOWN ON THIS PAGE REQUIRES THE USE OF THIRTY-TWO TYPE I REMOVABLE TIEDOWN ANCHORS (SIXTEEN ON EACH SIDE OF THE TRAILER). SEE SPECIAL NOTE 8 ON PAGE 6.

(CONTINUED BELOW)

PALLETIZED 155MM PROPELLING CHARGES PACKED IN THE M13 SERIES CONTAINER.



REAR OF TRAILER.

**ISOMETRIC VIEW**

(LOAD GUIDANCE NOTES CONTINUED)

5. A TOTAL OF EIGHTEEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE. SEE "LOADING, TIEDOWN, AND UNLOADING PROCEDURES" NOTE 6 ON PAGE 5.
6. IF AN UNEVEN QUANTITY OF PALLETIZED UNITS ARE BEING LOADED, SUCH AS FIFTEEN, POSITION ONE PALLETIZED UNIT IN THE CENTER OF THE TRAILER WIDTH AND TIGHT AGAINST THE REAR TWO LATERALLY ADJACENT PALLETIZED UNITS, AS SHOWN IN THE LOAD ON PAGE 11.
7. WHEN LOADING ONE PALLETIZED UNIT ON A TRAILER, POSITION THE PALLETIZED UNIT IN THE CENTER OF THE TRAILER WIDTH AND IN A LONGITUDINAL LOCATION THAT WILL ALLOW TWO STRAPS TO BE POSITIONED OVER TOP OF THE PALLETIZED UNIT AND ONE STRAP AROUND THE PALLET BASE AT EACH END. USE THE LOAD ON PAGE 10 FOR GUIDANCE.
8. IF IT IS DESIRABLE TO LOAD A ROW OF TWO OR MORE SINGLE PALLETIZED UNITS DOWN THE CENTER OF THE TRAILER LENGTH, USE THE LOAD ON PAGE 10 FOR GUIDANCE. NOTE: ONE ADDITIONAL STRAP MARKED ② WILL BE REQUIRED, AROUND THE BASE OF THE PALLET, AT THE FORWARD END OF THE LOAD.

**KEY NUMBERS**

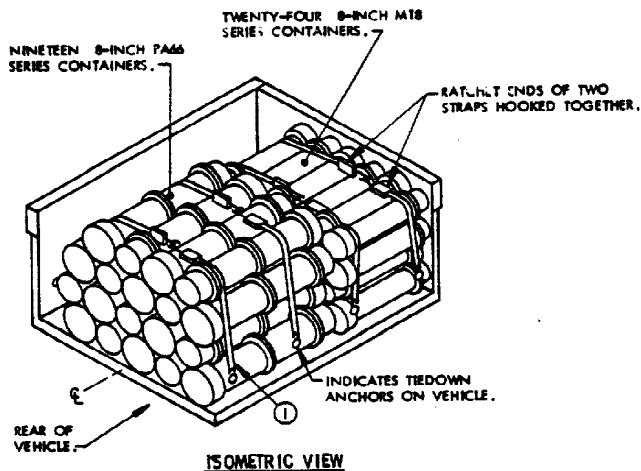
- ① WEB STRAP TIEDOWN ASSEMBLY (16 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF TRAILER, OVER TOP OF PALLETIZED UNIT (S), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE TRAILER. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 5 ON PAGE 6.
- ② WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, AROUND END OF PALLET (S), AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 6 ON PAGE 6.

**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETIZED UNITS	16	28,256 LBS

**SPECIAL NOTES:**

1. THE LOADS SHOWN ON PAGES 21 THROUGH 25 ARE BASED ON TESTED METHODS OF SECURING LOOSE PROPELLING CHARGE CONTAINERS IN/ON TACTICAL VEHICLES. WITH THE EXCEPTION OF THE LOAD ON PAGE 21, THE PROCEDURES SHOWN CAN BE USED IN/ON CARGO TRUCKS SUCH AS THE M54, 5-TON, AND CARGO TRAILERS SUCH AS THE M105, 1-1/2-TON, HAVING TIEDOWN ANCHORS LOCATED IN THE SIDE WALLS AND END WALLS. ALSO, THE PROCEDURES SHOWN CAN BE USED ON SEMITRAILERS SUCH AS THE M871, 22-1/2-TON, AND CARGO TRUCK, SUCH AS THE M977, 10-TON, HEMTT, HAVING TIEDOWN ANCHORS LOCATED ON THE FLOOR. NOTE: IF LOADING A "HEMTT" ALSO SEE THE SPECIAL HEMTT LOADING SECTION ON PAGES 26 THROUGH 35.
2. THE TERM "LOOSE" PROPELLING CHARGE CONTAINERS REFERS TO PROPELLING CHARGE CONTAINERS REMAINING AFTER THE STEEL UNITIZING STRAPS ON A PALLETIZED UNIT HAVE BEEN CUT AND THE PROPELLING CHARGE CONTAINERS REMOVED FROM THE PALLET BASE.
3. THE LOOSE PROPELLING CHARGE CONTAINERS SHOWN IN THE LOADS ON PAGES 21 THROUGH 25 WERE SELECTED AS TYPICAL AND THE METHODS SHOWN WILL APPLY TO ANY LOOSE PROPELLING CHARGE CONTAINER OF OTHER DIMENSIONS AND WEIGHTS.
4. THE TACTICAL VEHICLES SHOWN IN THE LOADS ON PAGES 21 THROUGH 25 WERE SELECTED AS TYPICAL AND OTHER TYPES OF VEHICLES MAY BE USED IN LIEU OF THOSE SHOWN AS LONG AS THEY COMPLY WITH GENERAL NOTE "C" ON PAGE 2.
5. WHEN LOADING LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF PALLETIZED UNITS AS SHOWN ON PAGE 24, OR ON TOP OF PALLET BASES AS SHOWN ON PAGE 25, ASSURE THAT ALL LOOSE CONTAINERS ARE SECURED BY MANUALLY GUIDING CONTAINERS INTO A TIGHT CONFIGURATION AS THE TWO HOLD-DOWN STRAPS ARE BEING TIGHTENED. AFTER STRAPS HAVE BEEN RATCHETED TIGHT CHECK BUNDLE TO MAKE SURE ALL LOOSE CONTAINERS ARE SECURED. NOTE: WHEN USING THIS METHOD POSITION ONE THROUGH ONE FULL LAYER OF LOOSE CONTAINERS IN THE FIRST LAYER. A SECOND LAYER MUST CONSIST OF A MAXIMUM QUANTITY OF CONTAINERS THAT CAN BE POSITIONED ON THE FIRST LAYER, BY NESTING THE SECOND LAYER CONTAINERS ON THE FIRST LAYER OF CONTAINERS. IF THERE ARE NOT ENOUGH CONTAINERS FOR A FULL SECOND LAYER THEY MUST BE POSITIONED ON TOP OF A DIFFERENT PALLET OR PALLETIZED UNIT. FOR EXAMPLE, IF A FULL FIRST LAYER CONSISTED OF FIVE LOOSE CONTAINERS THE SECOND FULL LAYER WOULD HAVE TO CONSIST OF FOUR CONTAINERS. IF IT IS NECESSARY TO POSITION A QUANTITY OF LOOSE CONTAINERS ON TOP OF A PALLETIZED UNIT OR PALLET BASE, AND THE METHODS SHOWN ON PAGES 24 AND 25 ARE NOT DESIRABLE, A QUANTITY OF FIVE OR MORE LOOSE CONTAINERS MAY BE "BUNDLED" WITH TWO WEB STRAP TIEDOWN ASSEMBLIES AS SHOWN ON PAGE 22, AND THEN SECURED ON TOP OF A PALLETIZED UNIT OR PALLET BASE WITH TWO WEB STRAP TIEDOWN ASSEMBLIES.



**ISOMETRIC VIEW**

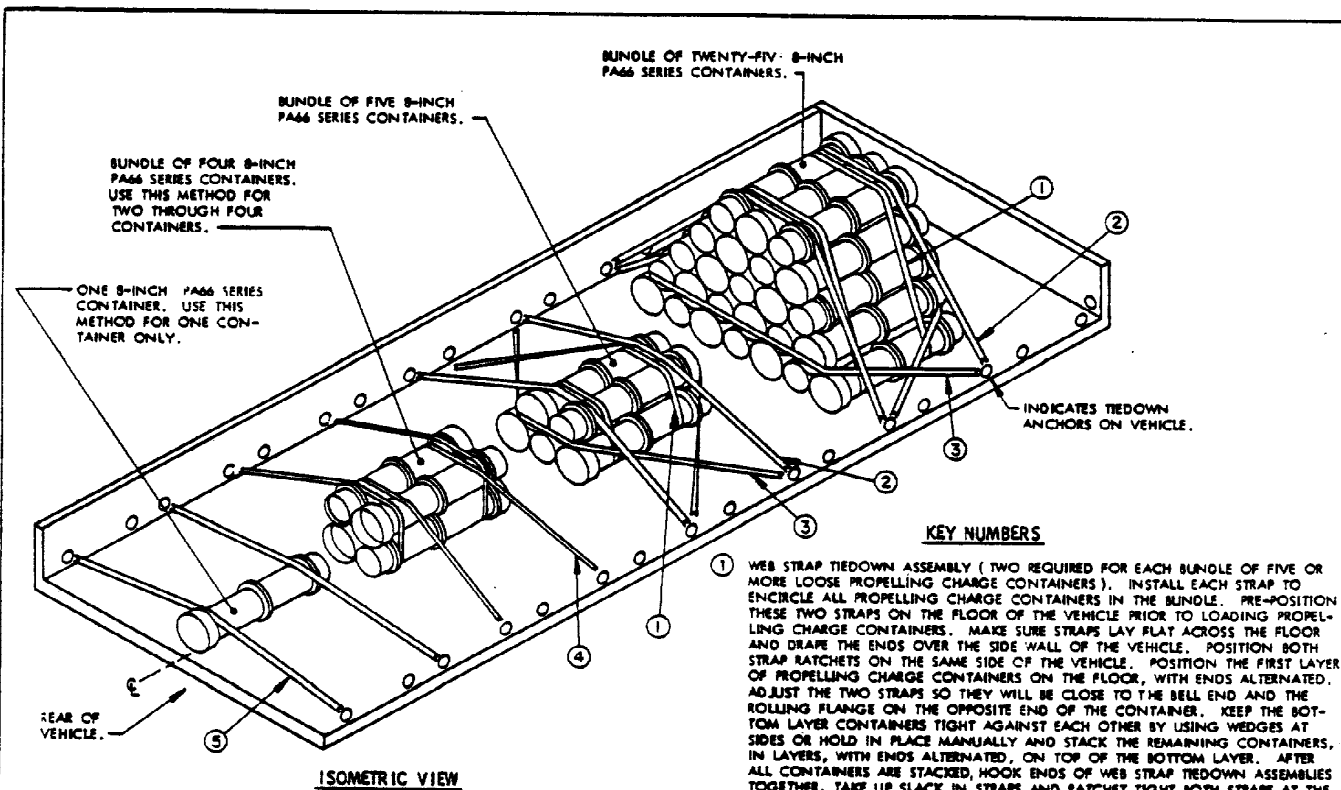
**LOAD GUIDANCE NOTES:**

1. A TYPICAL LOAD OF FORTY-THREE LOOSE PROPELLING CHARGE CONTAINERS IS SHOWN IN A TRAILER, AMMUNITION, 1-1/2-TON, M332, HAVING INSIDE DIMENSIONS OF 68-1/2" LONG BY 55-3/8" WIDE.
2. THE PROCEDURES SHOWN ON THIS PAGE ARE ONLY FOR LOADING LOOSE PROPELLING CHARGE CONTAINERS IN A TRAILER, AMMUNITION, 1-1/2-TON, M332.
3. PRIOR TO LOADING TRAILER PREPOSITION THE WEB STRAP TIEDOWN ASSEMBLIES AS INSTRUCTED IN KEY NUMBER ① ON THIS PAGE. POSITION ONE LAYER OF LOOSE PROPELLING CHARGE CONTAINERS ON FLOOR OF TRAILER, ENDS REVERSED, AND BUTTED TIGHT AGAINST THE END WALL. REPEAT THIS PROCEDURE UNTIL ALL CONTAINERS OF SAME SIZE ARE LOADED, OR MAXIMUM STACK HEIGHT IS ACHIEVED. STACK HEIGHT IS ACHIEVED WHEN TOP LAYER OF CONTAINERS EXTENDS PARTIALLY ABOVE THE TOP OF THE END WALL. IN THE TYPICAL LOAD ABOVE THERE IS ONE STACK OF NINETEEN, 8-INCH, PA66 SERIES CONTAINERS AGAINST THE REAR WALL OF THE TRAILER AND ONE STACK OF TWENTY-FOUR, 8-INCH, M18 SERIES CONTAINERS AGAINST THE FORWARD END WALL OF THE TRAILER. FOR ALTERNATIVE METHODS USE THE PROCEDURES SHOWN ON PAGES 22 THROUGH 25.
4. A TOTAL OF EIGHT WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN. EACH STRAP ASSEMBLY, SHOWN AS KEY NUMBER ①, CONSISTS OF TWO WEB STRAP ASSEMBLIES WITH RATCHET ENDS HOOKED TOGETHER ON TOP OF LOAD.
5. IF ONLY ONE STACK ( BUNDLE ) OF CONTAINERS IS TO BE LOADED THE CONTAINERS MUST BE POSITIONED TIGHT AGAINST AN END WALL AND SECURED AS INSTRUCTED IN KEY NUMBERS ①, ②, AND ③ ON PAGE 23. IF LOADING ONE THROUGH FIVE LOOSE CONTAINERS USE THE PROCEDURES SHOWN ON PAGE 22.
6. FOR ALTERNATIVE METHODS OF SECURING LOOSE PROPELLING CHARGE CONTAINERS USE THE PROCEDURES SHOWN ON PAGES 24 AND 25.

**KEY NUMBER**

- ① WEB STRAP TIEDOWN ASSEMBLY ( 8 REQD ). PRIOR TO LOADING TRAILER ATTACH THE NON-RATCHET END OF A STRAP TO A TIEDOWN ANCHOR ON SIDEWALL OF TRAILER AND DRAPE RATCHET END OF STRAP OVER TRAILER SIDE WALL. DO THIS WITH ALL EIGHT STRAPS AT THE FOUR TIEDOWN ANCHOR LOCATIONS ON EACH SIDE OF THE TRAILER. FOLLOW THE LOADING INSTRUCTIONS IN LOAD GUIDANCE NOTE 3 ON THIS PAGE, THEN HOOK RATCHET ENDS OF MATING STRAPS TOGETHER OVER TOP OF EACH STACK, TAKE UP EXCESS SLACK IN STRAPS AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

LOAD AS SHOWN		WEIGHT ( APPROX )
ITEM	QUANTITY	
LOOSE CONTAINERS	43	2,207 LBS



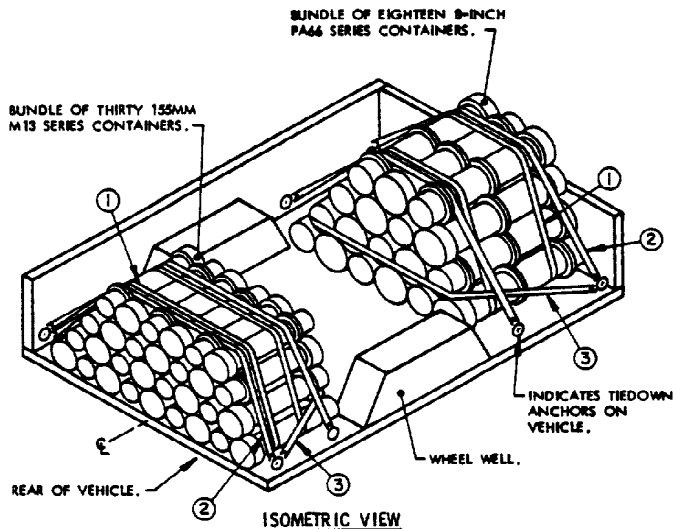
ISOMETRIC VIEW

KEY NUMBERS

LOAD GUIDANCE NOTES:

1. TYPICAL METHODS FOR SECURING ONE OR MORE LOOSE PROPELLING CHARGE CONTAINERS ARE SHOWN IN A TRUCK, CARGO, 5-TON, M55, HAVING INSIDE DIMENSIONS OF 244" LONG BY 98" 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 ON THE SIDEWALL, END WALL, OR FLOOR, MAY BE USED TO TRANSPORT THE METHOD (S) SHOWN.
3. THE METHODS SHOWN ABOVE DEPICT SECUREMENT OF ONE LOOSE 8-INCH PA66 SERIES CONTAINER, FOUR LOOSE 8-INCH PA66 SERIES CONTAINERS, FIVE LOOSE 8-INCH PA66 SERIES CONTAINERS, AND TWENTY-FIVE LOOSE 8-INCH PA66 SERIES CONTAINERS. TWO CONTAINERS OR MORE MAY BE SECURED IN BUNDLES AS SHOWN ABOVE. IF LOADING CONTAINERS OF OTHER DIMENSIONS AND QUANTITIES, FOLLOW THESE SAME PROCEDURES. FOR ALTERNATIVE METHODS OF SECURING LOOSE CONTAINERS USE THE PROCEDURES SHOWN ON PAGES 23 THROUGH 25.
4. IF LOADING BUNDLES OF PROPELLING CHARGE CONTAINERS IN A CARGO VEHICLE HAVING SIDE WALLS AND END WALLS, THE CONTAINERS MAY BE POSITIONED AGAINST THE END WALL, AS SHOWN IN THE LOAD ON PAGE 23, IF DESIRED.
5. THE PROCEDURES SHOWN ABOVE MAY BE USED FOR SECURING LOOSE PROPELLING CHARGE CONTAINERS ON SEMITRAILERS SUCH AS THE M127, 12-TON, THE M127 22-1/2-TON, AND THE M127, 34-TON. THE WEB STRAP TIEDOWN ASSEMBLIES WILL BE ATTACHED TO DESIGNATED TIEDOWN ANCHORS LOCATED ON THE FLOOR OF THE SEMITRAILER IN LIEU OF THE SIDE WALL AS SHOWN ABOVE.
6. THE QUANTITY OF CONTAINERS WITHIN A BUNDLE MAY BE A MINIMUM OF FIVE, UP TO A QUANTITY THAT CAN BE ENCIRCLED WITH ONE WEB STRAP TIEDOWN ASSEMBLY, SHOWN AS KEY NUMBER ① ABOVE. SEE LOAD GUIDANCE NOTE 6 ON PAGE 23, IF CONTAINERS OF DIFFERENT LENGTHS AND DIAMETERS ARE TO BE MIXED WITHIN THE SAME BUNDLE.

- ① WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF FIVE OR MORE LOOSE PROPELLING CHARGE CONTAINERS ). INSTALL EACH STRAP TO ENCIRCLE ALL PROPELLING CHARGE CONTAINERS IN THE BUNDLE. PRE-POSITION THESE TWO STRAPS ON THE FLOOR OF THE VEHICLE PRIOR TO LOADING PROPELLING CHARGE CONTAINERS. MAKE SURE STRAPS LAY FLAT ACROSS THE FLOOR AND DRAPE THE ENDS OVER THE SIDE WALL OF THE VEHICLE. POSITION BOTH STRAP RATCHETS ON THE SAME SIDE OF THE VEHICLE. POSITION THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS ON THE FLOOR, WITH ENDS ALTERNATED. ADJUST THE TWO STRAPS SO THEY WILL BE CLOSE TO THE BELL END AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE CONTAINER. KEEP THE BOTTOM LAYER CONTAINERS TIGHT AGAINST EACH OTHER BY USING WEDGES AT SIDES OR HOLD IN PLACE MANUALLY AND STACK THE REMAINING CONTAINERS, IN LAYERS, WITH ENDS ALTERNATED, ON TOP OF THE BOTTOM LAYER. AFTER ALL CONTAINERS ARE STACKED, HOOK ENDS OF WEB STRAP TIEDOWN ASSEMBLIES TOGETHER, TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. NOTE: AS THE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A COMPACT TIGHT BUNDLE. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ② WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF FIVE OR MORE LOOSE PROPELLING CHARGE CONTAINERS ). INSTALL EACH STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, OVER TOP OF PROPELLING CHARGE CONTAINERS, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. POSITION BOTH RATCHETS ON THE SAME SIDE OF THE VEHICLE. ATTACH WEB STRAP TIEDOWN ASSEMBLY MARKED ③ TO THE TIEDOWN ANCHORS PRIOR TO RATCHETING WEB STRAP TIEDOWN ASSEMBLIES ② TIGHT. TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS MARKED ④ AT THE SAME TIME. NOTE: THESE STRAPS SHOULD ALWAYS BE POSITIONED BETWEEN THE BELL ON ONE END OF A CONTAINER AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE SAME CONTAINER. IN SOME VEHICLES, DUE TO LOCATION OF TIEDOWN ANCHORS, IT MAY BE NECESSARY TO ANGLE THESE STRAPS SLIGHTLY TO MEET THIS REQUIREMENT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ③ WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF FIVE OR MORE LOOSE PROPELLING CHARGE CONTAINERS ). INSTALL STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, AROUND END OF PROPELLING CHARGE CONTAINER BUNDLE, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ④ WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF TWO THROUGH FOUR LOOSE PROPELLING CHARGE CONTAINERS ). INSTALL EACH STRAP TO ENCIRCLE ALL PROPELLING CHARGE CONTAINERS IN THE BUNDLE. PRE-POSITION THESE TWO STRAPS ON THE FLOOR OF THE VEHICLE, IN LINE WITH THE TIEDOWN ANCHORS TO BE USED, PRIOR TO LOADING PROPELLING CHARGE CONTAINERS. MAKE SURE THE STRAPS LAY FLAT ACROSS THE FLOOR, WITH THE RATCHET HANDLE FACING DOWN, AND DRAPE THE ENDS OVER THE SIDE WALL OF THE VEHICLE. POSITION BOTH STRAP RATCHETS ON THE SAME SIDE OF THE VEHICLE. POSITION TWO, THREE, OR FOUR LOOSE PROPELLING CHARGE CONTAINERS ON THE FLOOR, WITH ENDS ALTERNATED, AND CENTERED OVER TOP OF THE TWO STRAPS. WHILE HOLDING THE CONTAINERS IN POSITION BRING EACH END OF A STRAP UP, CROSS ENDS OVER TOP OF BUNDLE, AND ATTACH ENDS OF STRAP TO TIEDOWN ANCHORS ON SIDE OF VEHICLE. TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. NOTE: AS THESE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A COMPACT TIGHT BUNDLE. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ⑤ WEB STRAP TIEDOWN ASSEMBLY ( 2 REQD ). INSTALL EACH STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, OVER TOP OF PROPELLING CHARGE CONTAINER, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS MARKED ③ AT THE SAME TIME. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.



### KEY NUMBERS

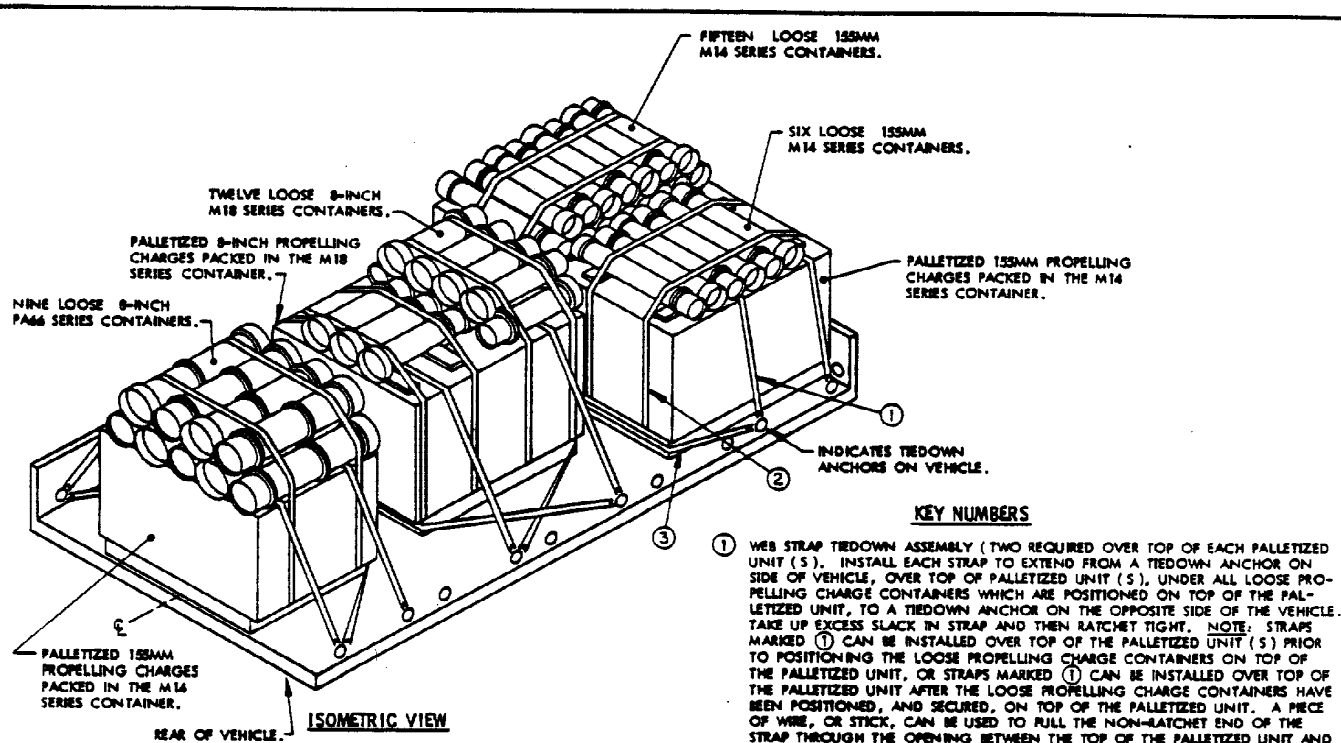
- ① WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF LOOSE PROPELLING CHARGE CONTAINER ). INSTALL EACH STRAP TO ENCIRCLE ALL PROPELLING CHARGE CONTAINERS IN THE BUNDLE. RE-POSITION THESE TWO STRAPS ON THE FLOOR OF THE VEHICLE PRIOR TO LOADING PROPELLING CHARGE CONTAINERS. MAKE SURE STRAPS LAY FLAT ACROSS THE FLOOR AND DRAPE THE ENDS OVER THE SIDE WALL OF THE VEHICLE. POSITION BOTH STRAP RATCHETS ON THE SAME SIDE OF THE VEHICLE. POSITION THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS ON THE FLOOR, WITH ENDS ALTERNATED, AND TIGHT AGAINST THE END WALL. ADJUST THE TWO STRAPS SO THEY WILL BE CLOSE TO THE BELL END AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE CONTAINER. KEEP THE BOTTOM LAYER CONTAINERS TIGHT AGAINST EACH OTHER BY USING WEDGES AT SIDES OR HOLD IN PLACE MANUALLY AND STACK THE REMAINING CONTAINERS, IN LAYERS, WITH ENDS ALTERNATED, ON TOP OF THE BOTTOM LAYER. AFTER ALL CONTAINERS ARE STACKED, HOOK ENDS OF WEB STRAP TIEDOWN ASSEMBLIES TOGETHER, TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. NOTE: AS THE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A COMPACT TIGHT BUNDLE. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ② WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF LOOSE PROPELLING CHARGE CONTAINERS ). INSTALL EACH STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, OVER TOP OF PROPELLING CHARGE CONTAINERS, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. POSITION BOTH RATCHETS ON THE SAME SIDE OF THE VEHICLE. ATTACH WEB STRAP TIEDOWN ASSEMBLY MARKED ③ TO THE TIEDOWN ANCHOR PRIOR TO RATCHETING WEB STRAP TIEDOWN ASSEMBLIES MARKED ② TIGHT. TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS MARKED ② AT THE SAME TIME. NOTE: THESE STRAPS SHOULD ALWAYS BE POSITIONED BETWEEN THE BELL ON ONE END OF A CONTAINER AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE SAME CONTAINER. IN SOME VEHICLES, DUE TO LOCATION OF TIEDOWN ANCHORS, IT MAY BE NECESSARY TO ANGLE THESE STRAPS SLIGHTLY TO MEET THIS REQUIREMENT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ③ WEB STRAP TIEDOWN ASSEMBLY ( 1 REQD ). INSTALL STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, AROUND END OF PROPELLING CHARGE CONTAINER BUNDLE, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

### LOAD GUIDANCE NOTES:

1. A TYPICAL LOAD OF FORTY-EIGHT LOOSE PROPELLING CHARGE CONTAINERS IS SHOWN IN A TRAILER, CARGO, 1-1/2-TON, M105, HAVING INSIDE DIMENSIONS OF 110" LONG BY 74" 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 ON THE SIDEWALL, END WALL, OR FLOOR, MAY BE USED TO TRANSPORT THE LOAD SHOWN, OR A PARTIAL LOAD.
3. IN THE TYPICAL LOAD ABOVE THERE IS ONE BUNDLE OF EIGHTEEN 8-INCH PA66 SERIES CONTAINERS, AND ONE BUNDLE OF THIRTY 135MM M13 SERIES CONTAINERS. THE QUANTITY OF CONTAINERS WITHIN A BUNDLE MAY BE A MINIMUM OF FIVE, UP TO A QUANTITY THAT CAN BE ENCIRCLED WITH ONE WEB STRAP TIEDOWN ASSEMBLY. IF LOADING CONTAINERS OF OTHER DIMENSIONS AND QUANTITIES, FOLLOW THESE SAME PROCEDURES. FOR ALTERNATIVE METHODS OF SECURING LOOSE CONTAINERS USE THE PROCEDURES SHOWN ON PAGES 22, 24, AND 25.
4. IF LOADING BUNDLES OF PROPELLING CHARGE CONTAINERS ON A SEMITRAILER, OR AWAY FROM THE END WALL IN A CARGO TRUCK, USE THE PROCEDURES SHOWN IN THE LOAD ON PAGE 22.
5. A TOTAL OF TEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN.
6. LOOSE PROPELLING CHARGE CONTAINERS OF DIFFERENT LENGTHS AND DIAMETERS MAY BE MIXED WITHIN THE SAME BUNDLE, AS LONG AS THEY ARE POSITIONED IN SUCH A MANNER THAT ALL OF THE CONTAINERS WITHIN THE COMPLETED BUNDLE ARE HELD TIGHT. GENERALLY, IT IS BEST TO POSITION THE LARGER CONTAINERS ON THE BOTTOM AND THE SMALLER CONTAINERS ON THE TOP. SHORT CONTAINERS SHOULD BE CENTERED ON LONG CONTAINERS AND, WHEN POSSIBLE, POSITION IN SUCH A MANNER THAT THE ROLLING FLANGES AND BELL ENDS WILL "LOCK" IN ON OTHER CONTAINERS AND HELP SECURE THE BUNDLE. NOTE: AFTER A BUNDLE OF MIXED PROPELLING CHARGE CONTAINERS HAS BEEN SECURED IT MAY BE POSSIBLE TO MANUALLY "WIGGLE" A CONTAINER WITHIN THE BUNDLE. THIS IS ACCEPTABLE AS LONG AS THE CONTAINER CANNOT BE MANUALLY PULLED OUT OF THE BUNDLE AND IT STAYS IN PLACE DURING TRANSPORT. FOR EXAMPLE OF MIXED CONTAINERS WITHIN THE SAME BUNDLE SEE THE LOAD SHOWN ON PAGE 33.

### LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT ( APPROX )
LOOSE CONTAINERS	48	2,301 LBS



**LOAD GUIDANCE NOTES:**

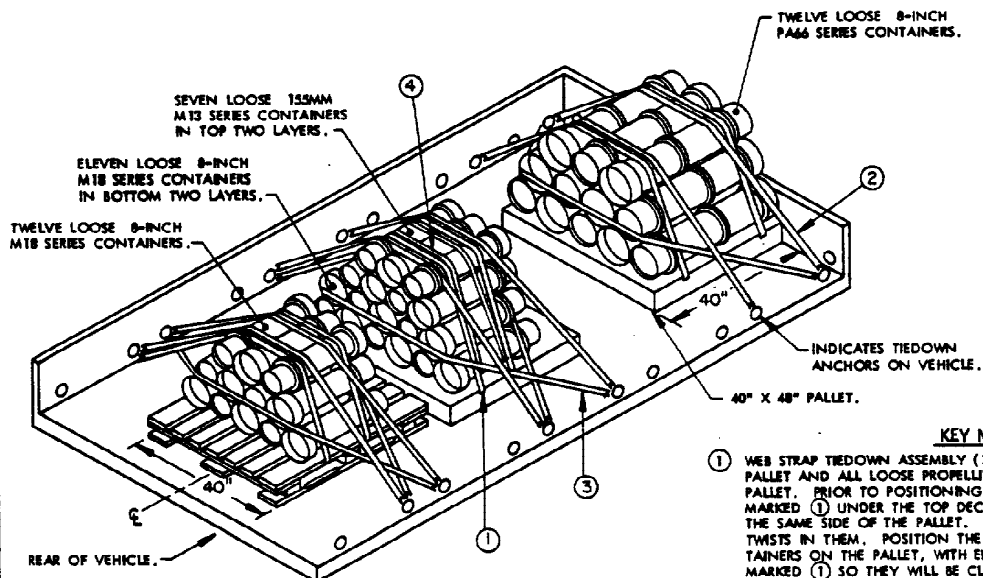
1. TYPICAL METHODS FOR SECURING LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF PALLETTIZED UNITS, ARE SHOWN IN A TRUCK, CARGO, 5-TON, M54, HAVING INSIDE DIMENSIONS OF 168" LONG BY 88" WIDE.
2. THE VEHICLE SHOWN WAS SELECTED AS TYPICAL ONLY, AND VEHICLES OF OTHER DIMENSIONS, AND/OR TRAILERS WHICH HAVE A SUFFICIENT QUANTITY OF TIEDOWN ANCHORS, LOCATED ON THE SIDE WALL, END WALL, OR FLOOR, MAY BE USED TO TRANSPORT THE METHOD (S) SHOWN.
3. THE METHODS SHOWN ABOVE DEPICT SECUREMENT OF LOOSE PROPELLING CHARGE CONTAINERS POSITIONED ON TOP OF PALLETTIZED UNITS WHICH ARE SECURED TO THE VEHICLE. HOLD-DOWN STRAPS MARKED ① ARE POSITIONED OVER TOP OF THE PALLETTIZED UNIT AND MUST NOT BE POSITIONED OVER TOP OF THE LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF A PALLETTIZED UNIT. SEE KEY NUMBERS ① AND ② ON THIS PAGE FOR GUIDANCE WHEN LOADING LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF PALLETTIZED UNITS. FOR ALTERNATIVE METHODS OF SECURING LOOSE PROPELLING CHARGE CONTAINERS USE THE PROCEDURES SHOWN ON PAGES 22, 23, AND 25.
4. IN THE METHODS SHOWN ABOVE THERE IS ONE PALLETTIZED UNIT OF 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER WITH NINE LOOSE 8-INCH P466 SERIES CONTAINERS ON TOP, ONE PALLETTIZED UNIT OF 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER WITH SIX LOOSE 155MM M14 SERIES CONTAINERS ON TOP, ONE PALLETTIZED UNIT OF 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER WITH FIFTEEN LOOSE 155MM M14 SERIES CONTAINERS ON TOP, AND ONE PALLETTIZED UNIT OF 8-INCH PROPELLING CHARGES PACKED IN THE M18 SERIES CONTAINER WITH TWELVE LOOSE 8-INCH M18 SERIES CONTAINERS ON TOP. IF LOADING PALLETTIZED UNITS AND LOOSE PROPELLING CHARGE CONTAINERS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES. SEE SPECIAL NOTE 5 ON PAGE 20.
5. THE QUANTITY OF LOOSE CONTAINERS POSITIONED ON TOP OF A PALLETTIZED UNIT MAY BE ONE CONTAINER, UP TO THE MAXIMUM QUANTITY THAT CAN BE POSITIONED IN THE BOTTOM LAYER. IF MORE THAN ONE FULL LAYER OF LOOSE CONTAINERS IS TO BE POSITIONED ON TOP OF A PALLETTIZED UNIT SEE SPECIAL NOTE 5 ON PAGE 20. NOTE: THE CONTAINERS MAY SEEK THEIR NATURAL POSITION DURING TRANSPORT. IF SO, CHECK STRAPS MARKED ② FOR TIGHTNESS, AND RE-TIGHTEN IF NECESSARY.
6. ALL LOOSE CONTAINERS POSITIONED ON TOP OF A PALLETTIZED UNIT MUST FORM A TIGHT BUNDLE AFTER STRAPS MARKED ② ARE RATCHETED TIGHT. IF CONTAINERS DO NOT FORM A TIGHT BUNDLE, OR IF CONTAINERS OF DIFFERENT SIZES ARE BEING POSITIONED ON TOP OF THE SAME PALLETTIZED UNIT, TWO ADDITIONAL WEB STRAP ASSEMBLIES WHICH ENIRCLE ALL LOOSE CONTAINERS WITHIN THE BUNDLE, ARE REQUIRED. SEE LOAD GUIDANCE NOTE 4 AND KEY NUMBER ④ ON PAGE 25 FOR ADDITIONAL GUIDANCE.

**KEY NUMBERS**

- ① WEB STRAP TIEDOWN ASSEMBLY (TWO REQUIRED OVER TOP OF EACH PALLETTIZED UNIT (S)). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETTIZED UNIT (S), UNDER ALL LOOSE PROPELLING CHARGE CONTAINERS WHICH ARE POSITIONED ON TOP OF THE PALLETTIZED UNIT, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. NOTE: STRAPS MARKED ① CAN BE INSTALLED OVER TOP OF THE PALLETTIZED UNIT (S) PRIOR TO POSITIONING THE LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF THE PALLETTIZED UNIT, OR STRAPS MARKED ① CAN BE INSTALLED OVER TOP OF THE PALLETTIZED UNIT AFTER THE LOOSE PROPELLING CHARGE CONTAINERS HAVE BEEN POSITIONED, AND SECURED, ON TOP OF THE PALLETTIZED UNIT. A PIECE OF WIRE, OR STICK, CAN BE USED TO PULL THE NON-RATCHET END OF THE STRAP THROUGH THE OPENING BETWEEN THE TOP OF THE PALLETTIZED UNIT AND THE BOTTOM OF THE LOOSE PROPELLING CHARGE CONTAINERS.
- ② WEB STRAP TIEDOWN ASSEMBLY (TWO REQUIRED FOR EACH BUNDLE OF LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF A PALLETTIZED UNIT). INSTALL EACH STRAP TO ENIRCLE PALLETTIZED UNIT AND ALL LOOSE PROPELLING CHARGE CONTAINERS POSITIONED ON TOP OF THE PALLETTIZED UNIT. PRIOR TO POSITIONING LOOSE CONTAINERS ON THE PALLETTIZED UNIT, TREAD STRAPS MARKED ② UNDER THE TOP DECK OF THE PALLET WITH BOTH RATCHET ENDS ON THE SAME SIDE OF THE PALLET. MAKE SURE THE STRAPS LAY FLAT WITH NO TWISTS IN THEM. POSITION THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS ON TOP OF THE PALLETTIZED UNIT, WITH ENDS ALTERNATED. ADJUST THE TWO STRAPS MARKED ② SO THEY WILL BE CLOSE TO THE BELL END AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE LOOSE CONTAINERS. KEEP THE BOTTOM LAYER CONTAINERS TIGHT AGAINST EACH OTHER AND STACK THE REMAINING CONTAINERS, IN LAYERS, WITH THE ENDS ALTERNATED, ON TOP OF THE BOTTOM LAYER. AFTER ALL CONTAINERS ARE STACKED, BRING ENDS OF STRAPS UP OVER TOP OF LOOSE CONTAINERS AND HOOK ENDS OF STRAP TOGETHER. TAKE UP EXCESS SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. NOTE: AS THE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A TIGHT BUNDLE ON TOP OF THE PALLETTIZED UNIT. THE CONTAINERS MAY SEEK THEIR NATURAL POSITION DURING TRANSPORT, IF SO, CHECK STRAPS FOR TIGHTNESS AND RE-TIGHTEN IF NECESSARY. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ③ WEB STRAP TIEDOWN ASSEMBLY (AS REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, AROUND END OF PALLET (S) AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

LOOSE PROPELLING CHARGE CONTAINERS SECURED ON  
TOP OF PALLETTIZED UNITS, IN A TRUCK, CARGO, 5-TON, M54





ISOMETRIC VIEW

**LOAD GUIDANCE NOTES:**

1. TYPICAL METHODS FOR SECURING LOOSE PROPELLING CHARGE CONTAINERS ON PALLET BASES, ARE SHOWN IN A TRUCK, CARGO, 5-TON, M54, HAVING INSIDE DIMENSIONS OF 166" LONG BY 98" 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 ON THE SIDEWALL, END WALL, OR FLOOR, MAY BE USED TO TRANSPORT THE METHOD (5) SHOWN.
3. THE METHODS SHOWN ABOVE DEPICT SECUREMENT OF LOOSE PROPELLING CHARGE CONTAINERS POSITIONED ON PALLET BASES. IF DESIRED, MIXED PROPELLING CHARGE CONTAINERS MAY BE POSITIONED ON THE SAME PALLET, AS SHOWN ON THE CENTER PALLET IN THE LOAD ABOVE. SEE KEY NUMBER ① ON THIS PAGE FOR GUIDANCE WHEN LOADING LOOSE PROPELLING CHARGE CONTAINERS. FOR ALTERNATIVE METHODS OF SECURING LOOSE CONTAINERS USE THE PROCEDURES SHOWN ON PAGES 22 THROUGH 24.
4. IN THE METHODS SHOWN ABOVE THERE IS ONE 40" X 48" PALLET WITH TWELVE LOOSE 8-INCH M18 SERIES CONTAINERS SECURED ON TOP, ONE 40" X 48" PALLET WITH TWELVE LOOSE 8-INCH P666 SERIES CONTAINERS SECURED ON TOP, AND ONE 40" X 48" PALLET WITH ELEVEN LOOSE 8-INCH M18 SERIES CONTAINERS AND SEVEN LOOSE 155MM M13 SERIES CONTAINERS SECURED ON TOP. IF LOADING LOOSE PROPELLING CHARGE CONTAINERS OF OTHER SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES. SEE SPECIAL NOTE 5 ON PAGE 20.
5. THE QUANTITY OF LOOSE CONTAINERS POSITIONED ON A PALLET BASE MAY BE ONE CONTAINER, UP TO THE MAXIMUM QUANTITY THAT CAN BE POSITIONED IN THE BOTTOM LAYER. IF MORE THAN ONE FULL LAYER OF LOOSE CONTAINERS IS TO BE POSITIONED ON A PALLET BASE SEE SPECIAL NOTE 5 ON PAGE 20. NOTE: THE CONTAINERS MAY SEEK THEIR NATURAL POSITION DURING TRANSPORT. IF SO, CHECK STRAPS MARKED ① FOR TIGHTNESS, AND RE-TIGHTEN IF NECESSARY.
6. ALL LOOSE CONTAINERS POSITIONED ON TOP OF A PALLET BASE MUST FORM A TIGHT BUNDLE AFTER STRAPS MARKED ② ARE RATCHETED TIGHT. IF CONTAINERS DO NOT FORM A TIGHT BUNDLE, OR IF CONTAINERS OF DIFFERENT SIZES ARE BEING POSITIONED ON TOP OF THE SAME PALLET BASE TWO ADDITIONAL WEB STRAP ASSEMBLIES MARKED ④ IN THE LOAD ABOVE, ARE REQUIRED. SEE KEY NUMBER ④ ON THIS PAGE FOR ADDITIONAL GUIDANCE.

- KEY NUMBERS**
- ① WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO ENCIRCLE PALLET AND ALL LOOSE PROPELLING CHARGE CONTAINERS POSITIONED ON THE PALLET. PRIOR TO POSITIONING CONTAINERS ON THE PALLET, THREAD STRAPS MARKED ① UNDER THE TOP DECK OF THE PALLET WITH BOTH RATCHET ENDS ON THE SAME SIDE OF THE PALLET. MAKE SURE THE STRAPS LAY FLAT WITH NO TWISTS IN THEM. POSITION THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS ON THE PALLET, WITH ENDS ALTERNATED. ADJUST THE TWO STRAPS MARKED ① SO THEY WILL BE CLOSE TO THE BELL END AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE CONTAINERS. KEEP THE BOTTOM LAYER CONTAINERS TIGHT AGAINST EACH OTHER AND STACK THE REMAINING CONTAINERS, IN LAYERS, WITH THE ENDS ALTERNATED, ON TOP OF THE BOTTOM LAYER. AFTER ALL CONTAINERS ARE STACKED, BRING ENDS OF STRAPS UP OVER TOP OF CONTAINERS AND HOOK ENDS OF STRAP TOGETHER. TAKE UP EXCESS SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. NOTE: AS THE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A TIGHT BUNDLE ON THE PALLET. THE CONTAINERS MAY SEEK THEIR NATURAL POSITION DURING TRANSPORT, IF SO, CHECK STRAPS FOR TIGHTNESS AND RE-TIGHTEN IF NECESSARY. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
  - ② WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, OVER TOP OF PROPELLING CHARGE CONTAINERS, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. POSITION BOTH RATCHETS ON THE SAME SIDE OF THE VEHICLE. ATTACH WEB STRAP TIEDOWN ASSEMBLY MARKED ③ TO THE TIEDOWN ANCHOR PRIOR TO RATCHETING WEB STRAP TIEDOWN ASSEMBLIES MARKED ② TIGHT. TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS MARKED ② AT THE SAME TIME. NOTE: THESE STRAPS SHOULD ALWAYS BE POSITIONED BETWEEN THE BELL ON ONE END OF A CONTAINER AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE SAME CONTAINER. IN SOME VEHICLES, DUE TO LOCATION OF TIEDOWN ANCHORS, IT MAY BE NECESSARY TO ANGLE THESE STRAPS SLIGHTLY TO MEET THIS REQUIREMENT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
  - ③ WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, AROUND END OF PROPELLING CHARGE CONTAINERS AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
  - ④ WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO ENCIRCLE ALL LOOSE PROPELLING CONTAINERS IN THE BUNDLE. PRE-POSITION THESE TWO STRAPS ON TOP OF THE PALLET BASE PRIOR TO LOADING THE PROPELLING CHARGE CONTAINERS. MAKE SURE STRAPS LAY FLAT ACROSS THE PALLET BASE AND DRAPE THE ENDS OVER THE SIDES. POSITION BOTH STRAP RATCHETS ON THE SAME SIDE OF THE PALLET BASE. POSITION THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS ON THE PALLET BASE, WITH ENDS ALTERNATED. ADJUST THE TWO STRAPS SO THEY WILL BE CLOSE TO THE BELL END AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE CONTAINER. KEEP THE BOTTOM LAYER OF CONTAINERS TIGHT AGAINST EACH OTHER AND STACK THE REMAINING CONTAINERS, IN LAYERS, WITH ENDS ALTERNATED, ON TOP OF THE BOTTOM LAYER. AFTER ALL CONTAINERS ARE STACKED, HOOK ENDS OF WEB STRAP TIEDOWN ASSEMBLIES TOGETHER, TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. NOTE: AS THE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A COMPACT TIGHT BUNDLE. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND LOAD GUIDANCE NOTE 6 ON THIS PAGE.

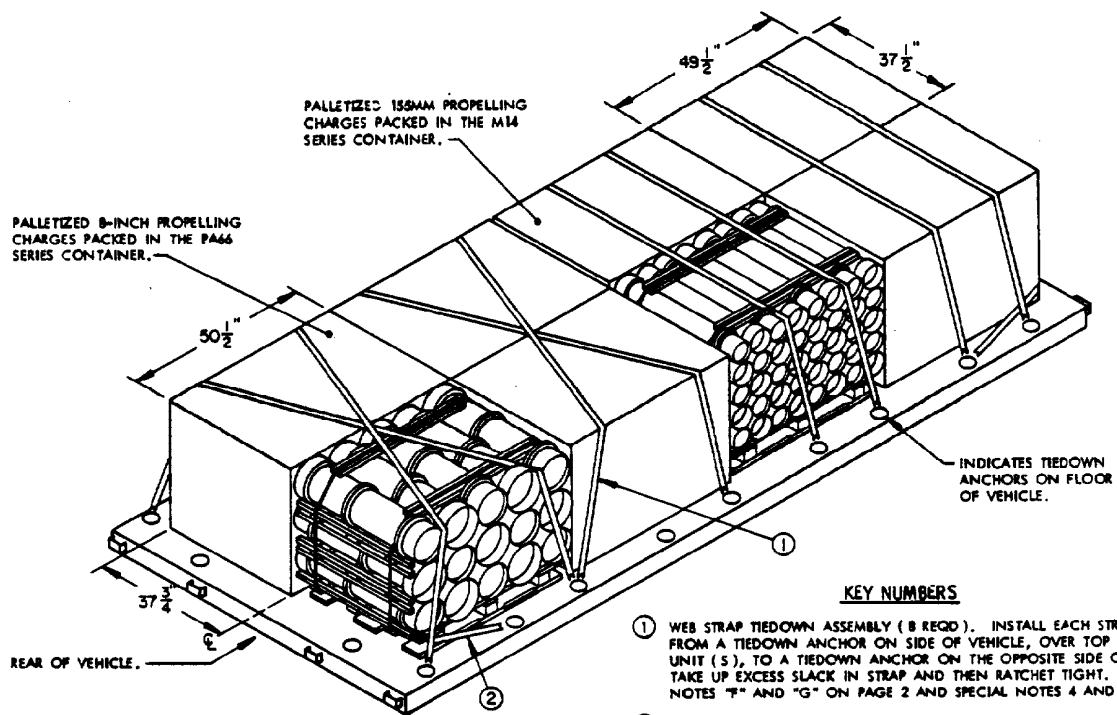
## SPECIAL NOTES:

( SPECIAL NOTES CONTINUED )

1. THE LOADS SHOWN ON PAGES 27 THROUGH 35 ARE BASED ON TESTED METHODS OF SECURING PALLETIZED AND/OR LOOSE PROPELLING CHARGE CONTAINERS IN/ON THE HEAVY EXPANDED MOBILITY TACTICAL TRUCK (HEMITT), 10-TON, M977 AND/OR M985. NOTE: THESE METHODS APPLY TO THE HEMIT ONLY. DO NOT POSITION PALLETIZED UNITS OR LOOSE CONTAINERS AGAINST THE END WALLS AND/OR SIDE WALLS.
2. THE PROCEDURES SHOWN ARE FOR SECUREMENT OF PALLETIZED UNITS HAVING STEEL UNITIZING STRAPS AND/OR "LOOSE" PROPELLING CHARGE CONTAINERS. THE TERM "LOOSE" PROPELLING CHARGE CONTAINERS REFERS TO PROPELLING CHARGE CONTAINERS REMAINING AFTER THE STEEL UNITIZING STRAPS ON A PALLETIZED UNIT HAVE BEEN CUT AND THE PROPELLING CHARGE CONTAINERS REMOVED FROM THE PALLET BASE.
3. PRIOR TO LOADING PALLETIZED UNITS ON A VEHICLE, SELECT THE QUANTITY OF PALLETIZED UNITS TO BE LOADED. DO NOT EXCEED THE OFF-HIGHWAY WEIGHT LIMIT OF THE VEHICLE. SELECT A LOCATION WITHIN THE LENGTH OF THE CARGO BED THAT WILL PROVIDE ADEQUATE TIEDOWN ANCHORS TO SECURE THE LOAD, USING THE TIEDOWN PROCEDURES DEPICTED ON PAGES 27 THROUGH 31.
4. EACH SINGLE PALLETIZED UNIT AND/OR TWO ADJACENT PALLETIZED UNITS POSITIONED ACROSS THE WIDTH OF THE VEHICLE, AS SHOWN ON PAGES 27 THROUGH 31 MUST BE SECURED WITH TWO STRAPS ATTACHED TO TIEDOWN ANCHORS ON ONE SIDE OF VEHICLE OVER TOP OF PALLETIZED UNIT (S), TO MATING TIEDOWN ANCHORS ON OPPOSITE SIDE OF VEHICLE. NOTE: DO NOT POSITION THESE STRAPS ACROSS LOAD ON LONGITUDINAL JOINTS BETWEEN PALLETIZED UNITS. IF THE TIEDOWN ANCHORS ON SIDE OF VEHICLE ARE TOO CLOSE TOGETHER, TOO FAR APART, OR ARE NOT IN A LOCATION WHICH WILL ALLOW ADEQUATE HOLD DOWN OF PALLETIZED UNIT (S) WHEN STRAPS ARE POSITIONED STRAIGHT OVER TOP OF LOAD, THE TWO HOLD DOWN STRAPS MAY BE CROSSED OVER THE TOP OF THE PALLETIZED UNIT (S) AS SHOWN IN THE LOAD ON PAGE 27.
5. THE PALLETIZED UNITS SHOWN IN THE LOADS ON PAGES 27 THROUGH 31 AND THE LOOSE PROPELLING CHARGE CONTAINERS SHOWN IN THE LOADS ON PAGES 32 THROUGH 35 WERE SELECTED AS TYPICAL AND THE METHODS SHOWN WILL APPLY TO ANY PALLETIZED UNIT, AND/OR LOOSE PROPELLING CHARGE CONTAINER, OF OTHER DIMENSIONS AND WEIGHTS.
6. WHEN LOADING PALLETIZED UNITS HAVING A LENGTH OF 43" OR MORE TWO WIDE, ACROSS THE WIDTH OF THE VEHICLE, THE TWO LATERALLY ADJACENT PALLETIZED UNITS MAY EXTEND OVER THE TOP OF THE TIEDOWN ANCHORS ON EACH SIDE OF THE VEHICLE PROHIBITING ATTACHMENT OF WEB STRAP TIEDOWN ASSEMBLIES, AND/OR IF WEB STRAP TIEDOWN ASSEMBLY CAN BE ATTACHED TO THE TIEDOWN ANCHORS, THE STRAP RATCHET BEARS AGAINST THE OVERHANG OF THE PALLETIZED UNIT AT SUCH AN ANGLE THAT IT INTERFERES WITH POSITIONING THE DROP-SIDES IN THE "UP" POSITION, AND WILL ALSO DAMAGE THE SIDES IF THEY ARE FORCED INTO POSITION AGAINST THE RATCHET. NOTE: WHEN SECURING WIDE LOADS USE ONE OF THE FOLLOWING METHODS:
  - A. HOOK THE RATCHET ENDS OF TWO WEB STRAP TIEDOWN ASSEMBLIES TOGETHER. POSITION THE RATCHETS ON TOP OF THE PALLETIZED UNITS, AND ATTACH THE NON-RATCHET HOOK END OF EACH STRAP TO A TIEDOWN ANCHOR ON EACH SIDE OF THE VEHICLE. MAKE SURE THERE IS A MINIMUM OF ONE AND ONE-HALF WRAPS OF STRAP ON ONE RATCHET, THEN TAKE UP EXCESS SLACK IN REMAINING RATCHET AND RATCHET TIGHT. THIS METHOD REQUIRES TWO WEB STRAP TIEDOWN ASSEMBLIES IN LIEU OF EACH STRAP MARKED ①, WHEN USING THE PROCEDURES SHOWN ON PAGES 27 THROUGH 30.
  - B. THE PALLETIZED UNITS CAN BE POSITIONED ONE WIDE, DOWN THE CENTER OF THE VEHICLE LENGTH, IN LIEU OF TWO WIDE. SEE THE LOAD ON PAGE 31 FOR EXAMPLE.
  - C. TWO LATERALLY ADJACENT PALLETIZED UNITS MAY BE CENTERED BETWEEN TWO TIEDOWN ANCHORS ON EACH SIDE OF THE VEHICLE THAT ARE FARTHER APART THEN THE PALLETIZED UNIT WIDTH, TO WHICH THE HOLD DOWN WEB STRAPS CAN BE ATTACHED, AND WHICH WILL PROVIDE CLEARANCE BETWEEN THE PALLETIZED UNIT AND THE STRAP RATCHET, AND BETWEEN THE SIDE WALLS OF THE VEHICLE AND THE STRAP RATCHET. SEE THE LOAD SHOWN ON PAGE 30 FOR EXAMPLE.
  - D. ONE PALLETIZED UNIT HAVING A LENGTH OF 40" OR LESS CAN BE POSITIONED LATERALLY ADJACENT TO THE PALLETIZED UNIT HAVING A LENGTH OF 43" OR MORE TO REDUCE THE TOTAL LOAD WIDTH. SEE THE LOAD SHOWN ON PAGE 29 FOR EXAMPLE.
  - E. THE TWO LATERALLY ADJACENT PALLETIZED UNITS CAN BE POSITIONED AS CLOSE AS POSSIBLE TO THE TIEDOWN ANCHORS ON ONE SIDE OF THE VEHICLES, MAKING MORE ROOM FOR THE RATCHET ON THE OPPOSITE SIDE OF THE VEHICLE.
7. THE PROCEDURES SHOWN ON PAGES 27 THROUGH 35 DO NOT REQUIRE THE DROP-SIDES AND/OR END WALLS FOR LOAD SECUREMENT. THE DROP-SIDES AND END WALLS HAVE BEEN OMITTED FOR CLARITY. HOWEVER, THE DROP-SIDES AND END WALLS MAY BE LEFT IN POSITION ON THE VEHICLE AS IT IS ONLY NECESSARY TO DROP THE SIDE PANELS FOR LOADING AND/OR UNLOADING.
8. ALL LOADS FROM ONE PALLETIZED UNIT TO A MAXIMUM LOAD OF PALLETIZED UNITS MUST BE SECURED LONGITUDINALLY WITH ONE STRAP AT EACH END, ATTACHED TO A TIEDOWN ANCHOR ON ONE SIDE OF THE VEHICLE AND POSITIONED AROUND THE END (S) OF THE PALLETIZED UNITS, TO A MATING TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE, AS SHOWN IN THE LOADS ON PAGES 27 THROUGH 31. NOTE: IF THERE IS NOT ENOUGH ROOM BETWEEN LOAD AND SIDEWALL OF VEHICLE FOR THE STRAP RATCHET, HOOK THE RATCHET ENDS OF TWO WEB STRAP TIEDOWN ASSEMBLIES TOGETHER. POSITION THE RATCHETS AT THE END OF THE LOAD AND ATTACH THE NON-RATCHET HOOK END OF EACH STRAP TO A TIEDOWN ANCHOR ON EACH SIDE OF THE VEHICLE. MAKE SURE THERE IS A MINIMUM OF ONE AND ONE-HALF WRAPS OF STRAP ON ONE RATCHET, THEN TAKE UP EXCESS SLACK IN REMAINING RATCHET AND RATCHET TIGHT. THIS METHOD REQUIRES TWO WEB STRAP TIEDOWN ASSEMBLIES IN LIEU OF ONE AT EACH LOCATION A LONGITUDINAL RETAINING STRAP IS REQUIRED. WHEN TWO STRAPS ARE HOOKED TOGETHER IT MAY BE NECESSARY TO POSITION THE RATCHETS UP ON THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS, AS SHOWN IN THE LOAD ON PAGE 13, TO PROVIDE MORE ROOM FOR RATCHETING.
9. WHEN LOADING LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF PALLETIZED UNITS AS SHOWN ON PAGE 34, OR ON TOP OF PALLET BASES AS SHOWN ON PAGE 35, ASSURE THAT ALL LOOSE CONTAINERS ARE SECURED BY MANUALLY GUIDING CONTAINERS INTO A TIGHT CONFIGURATION AS THE TWO HOLD-DOWN STRAPS ARE BEING TIGHTENED. AFTER STRAPS HAVE BEEN RATCHETED TIGHT CHECK BUNDLE TO MAKE SURE ALL LOOSE CONTAINERS ARE SECURED. NOTE: WHEN USING THIS METHOD POSITION ONE THROUGH ONE FULL LAYER OF LOOSE CONTAINERS IN THE FIRST LAYER. A SECOND LAYER MUST CONSIST OF A MAXIMUM QUANTITY OF CONTAINERS THAT CAN BE POSITIONED ON THE FIRST LAYER, BY NESTING THE SECOND LAYER CONTAINERS ON THE FIRST LAYER OF CONTAINERS. IF THERE ARE NOT ENOUGH CONTAINERS FOR A FULL SECOND LAYER THEY MUST BE POSITIONED ON TOP OF A DIFFERENT PALLET OR PALLETIZED UNIT. FOR EXAMPLE, IF A FULL FIRST LAYER CONSISTED OF FIVE LOOSE CONTAINERS THE SECOND FULL LAYER WOULD HAVE TO CONSIST OF FOUR CONTAINERS. IF IT IS NECESSARY TO POSITION A QUANTITY OF LOOSE CONTAINERS ON TOP OF A PALLETIZED UNIT OR PALLET BASE, AND THE METHODS SHOWN ON PAGES 34 AND 35 ARE NOT DESIRABLE, A QUANTITY OF FIVE OR MORE LOOSE CONTAINERS MAY BE "BUNDLED" WITH TWO WEB STRAP TIEDOWN ASSEMBLIES AS SHOWN ON PAGE 22, AND THEN SECURED ON TOP OF A PALLETIZED UNIT OR PALLET BASE WITH TWO WEB STRAP TIEDOWN ASSEMBLIES.

( CONTINUED AT RIGHT )

SECUREMENT OF PALLETIZED AND/OR LOOSE PROPELLING CHARGE CONTAINERS  
 LOADED ON THE HEAVY EXPANDED MOBILITY TACTICAL TRUCK (HEMITT), 10-TON, M977 AND/OR M985



**ISOMETRIC VIEW**

**KEY NUMBERS**

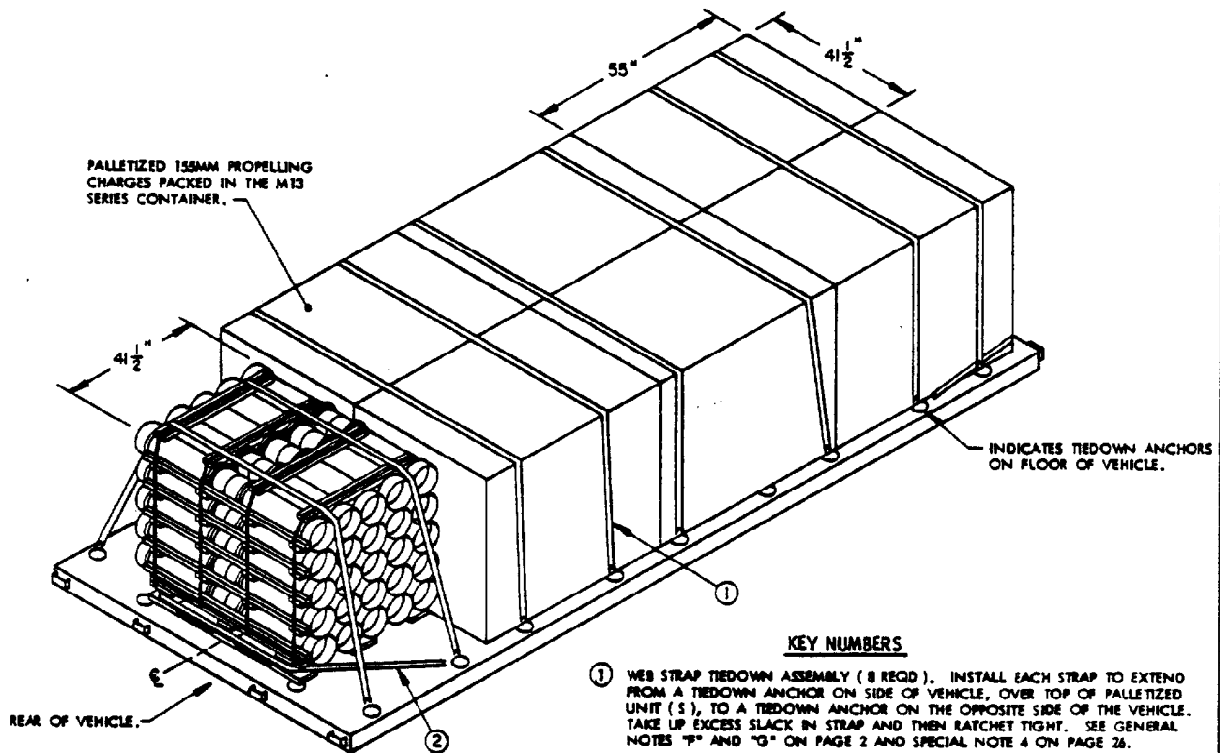
- ① WEB STRAP TIEDOWN ASSEMBLY ( 8 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT ( 5 ), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTES 4 AND 6 ON PAGE 26.
- ② WEB STRAP TIEDOWN ASSEMBLY ( 2 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, AROUND END OF PALLETS, AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTES 8 ON PAGE 26.

**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF EIGHT PALLETS OF PROPELLING CHARGE CONTAINERS IS SHOWN ON THE TRUCK, HEAVY EXPANDED MOBILITY (HEMTT), 10-TON, M977 AND/OR M983, HAVING INSIDE DIMENSIONS OF 216-3/8" LONG BY 90-3/4" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS OF THE PALLETIZED UNITS SHOWN.
2. FOUR PALLETIZED UNITS OF 8-INCH PROPELLING CHARGES PACKED IN THE PA66 SERIES CONTAINER, HAVING DIMENSIONS OF 50-1/2" WIDE BY 37-3/4" LONG BY 35-5/8" HIGH, AND FOUR PALLETIZED UNITS OF 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER, HAVING DIMENSIONS OF 49-1/2" WIDE BY 37-1/2" LONG BY 36" HIGH, ARE SHOWN AS A TYPICAL MIXED ITEM LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
3. THE PROCEDURES SHOWN ABOVE ARE FOR SECURING A TWO WIDE LOAD OF PALLETIZED UNITS HAVING A LENGTH LESS THAN 42". IF THE PALLETIZED UNITS BEING LOADED HAVE A LENGTH GREATER THAN 42", SEE SPECIAL NOTE 6 ON PAGE 26.
4. A TOTAL OF TEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE.

**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT ( APPROX )
PALLETIZED UNITS-----	8 -----	10,324 LBS



ISOMETRIC VIEW

LOAD GUIDANCE NOTES:

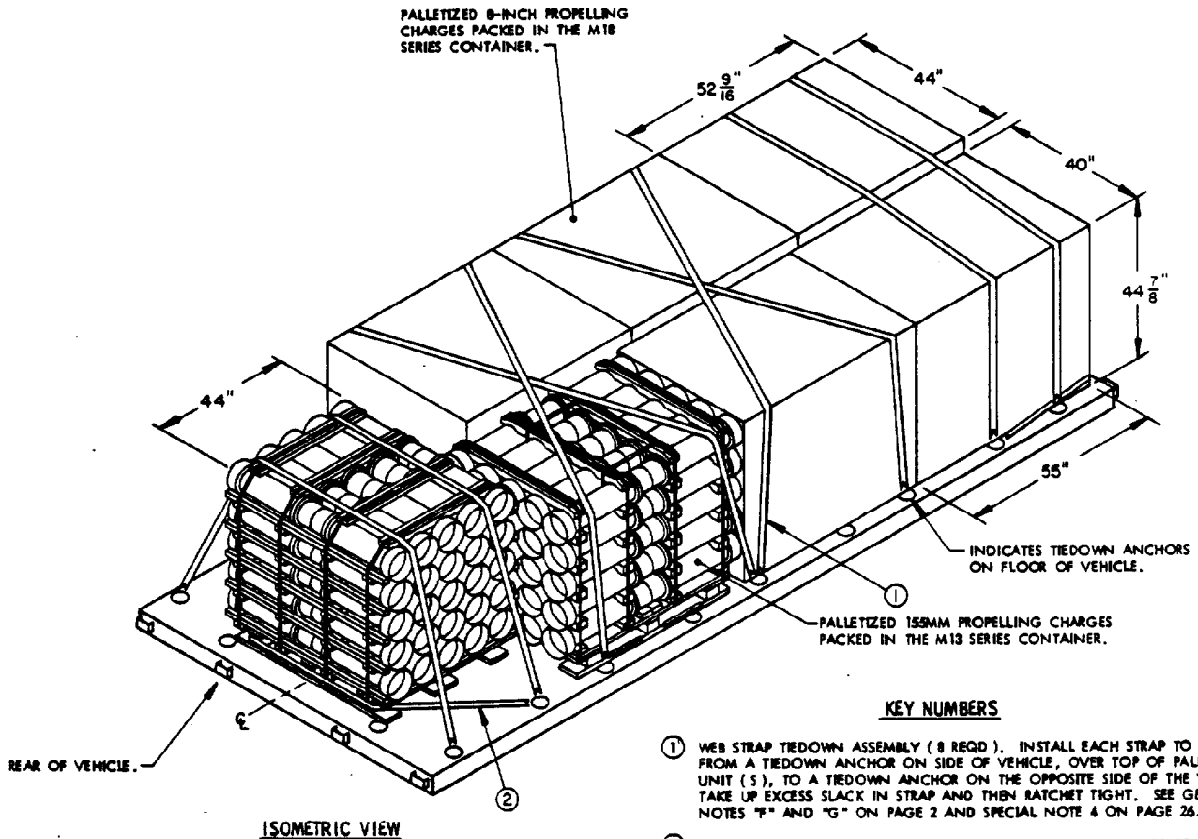
1. A MAXIMUM LOAD OF SEVEN PALLETIZED UNITS OF 155MM PROPELLING CHARGE CONTAINERS IS SHOWN ON THE TRUCK, HEAVY EXPANDED MOBILITY (HEMTT), 10-TON, M977 AND/OR M985, HAVING INSIDE DIMENSIONS OF 216-3/8" LONG BY 90-3/4" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS OF THE PALLETIZED UNIT SHOWN.
2. SEVEN PALLETIZED UNITS OF 155MM PROPELLING CHARGES PACKED IN THE M13 SERIES CONTAINER, HAVING DIMENSIONS OF 55" WIDE BY 41-1/2" LONG BY 43-7/8" HIGH ARE SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES.
3. THE PROCEDURES SHOWN ABOVE ARE FOR SECURING A LOAD OF PALLETIZED UNITS HAVING A LENGTH LESS THAN 42". IF THE PALLETIZED UNITS BEING LOADED HAVE A LENGTH GREATER THAN 42" SEE SPECIAL NOTE 6 ON PAGE 26. NOTE: THESE PALLETIZED UNITS CANNOT BE POSITIONED TWO WIDE AND FOUR LONG DUE TO THE 55" WIDTH DIMENSION. FOR A MAXIMUM LOAD POSITION ONE PALLETIZED UNIT AT THE REAR OF THE VEHICLE, WITH THE 55" WIDTH DIMENSION ACROSS THE WIDTH OF THE VEHICLE, AS SHOWN ABOVE.
4. A TOTAL OF TEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE.

KEY NUMBERS

- 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 ( 5 ), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 4 ON PAGE 26.
- ② WEB STRAP TIEDOWN ASSEMBLY ( 2 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, AROUND END OF PALLET, AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 8 ON PAGE 26.

LOAD AS SHOWN

<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT ( APPROX )</u>
PALLETIZED UNITS	7	11,202 LBS



ISOMETRIC VIEW

**KEY NUMBERS**

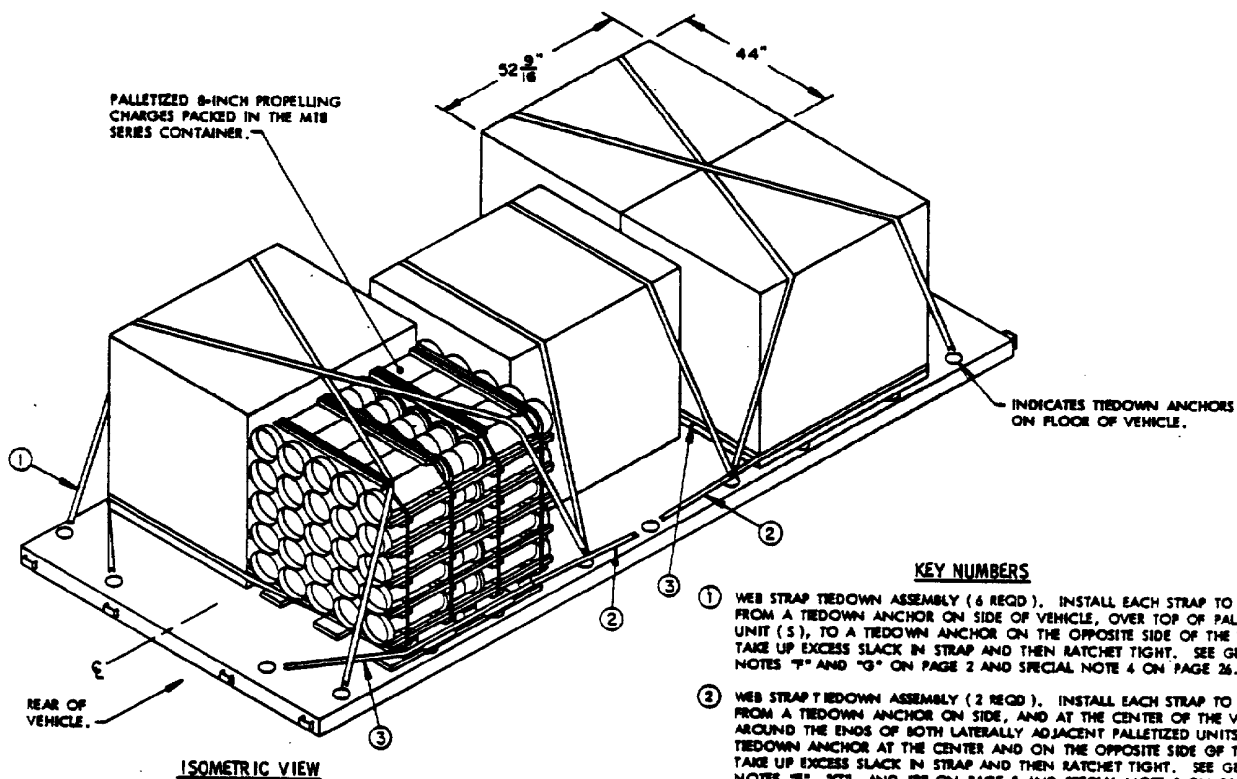
- ① WEB STRAP TIEDOWN ASSEMBLY ( 8 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETTIZED UNIT ( 5 ), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 4 ON PAGE 26.
- ② WEB STRAP TIEDOWN ASSEMBLY ( 2 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, AROUND END OF PALLETS, AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 8 ON PAGE 26.

**LOAD GUIDANCE NOTES:**

1. A MAXIMUM LOAD OF SEVEN PALLETS OF PROPELLING CHARGE CONTAINERS IS SHOWN ON THE TRUCK, HEAVY EXPANDED MOBILITY (HEMTT), 10-TON, M977 AND/OR M985, HAVING INSIDE DIMENSIONS OF 216-3/8" LONG BY 90-3/4" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS OF THE PALLETTIZED UNIT SHOWN.
2. THREE PALLETTIZED UNITS OF 155MM PROPELLING CHARGES PACKED IN THE M13 SERIES CONTAINER, HAVING DIMENSIONS OF 55" WIDE BY 40" LONG BY 44-7/8" HIGH, AND FOUR PALLETTIZED UNITS OF 8-INCH PROPELLING CHARGES PACKED IN THE M18 SERIES CONTAINER, HAVING DIMENSIONS OF 52-9/16" WIDE BY 44" LONG BY 49" HIGH, ARE SHOWN AS A TYPICAL MIXED ITEM LOAD. IF LOADING PALLETTIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, THESE SAME PROCEDURES MAY BE USED.
3. THE PROCEDURES SHOWN ABOVE ARE FOR SECURING PALLETTIZED UNITS HAVING A LENGTH OF 43" OR MORE, SUCH AS THE 8-INCH PALLETTIZED UNIT, WHICH HAS DIMENSIONS OF 52-9/16" WIDE BY 44" LONG BY 49" HIGH. IF THIS PALLETTIZED UNIT IS POSITIONED TWO WIDE ON A HEMTT THE TIEDOWN ANCHORS ON EACH SIDE OF THE VEHICLE WILL BE COVERED UP AND THE LOAD WOULD HAVE TO BE REDUCED TO FIVE PALLETTIZED UNITS AND SECURED AS SHOWN ON PAGE 30. HOWEVER, IF PALLETTIZED UNITS HAVING A LENGTH OF 40" OR LESS, SUCH AS THE 155MM PALLETTIZED UNIT, WHICH HAS DIMENSIONS OF 55" WIDE BY 40" LONG BY 44-7/8" HIGH, ARE POSITIONED ALONGSIDE OF THE 44" LONG PALLETTIZED UNIT ACROSS THE WIDTH OF THE VEHICLE, AS SHOWN ABOVE, THE TIEDOWN ANCHORS WILL NOT BE COVERED UP AND A MAXIMUM LOAD CAN BE ATTAINED. SEE SPECIAL NOTE 6 ON PAGE 26. NOTE: THE 8-INCH PALLETTIZED UNIT HAVING A WIDTH OF 52-9/16" CANNOT BE POSITIONED FOUR LONG ON THE REAR OF THE VEHICLE. FOR A MAXIMUM LOAD POSITION ONE PALLETTIZED UNIT AT THE REAR OF THE VEHICLE, WITH THE 52-9/16" DIMENSION ACROSS THE WIDTH OF THE VEHICLE, AS SHOWN ABOVE, OR ONE PALLETTIZED UNIT OF 155MM PROPELLING CHARGE CONTAINERS MAY BE POSITIONED AT THE REAR, IN LIEU OF THE PALLETTIZED UNIT OF 8-INCH PROPELLING CHARGE CONTAINERS. SEE PAGES 30 AND 31 FOR ALTERNATIVE PROCEDURES.
4. A TOTAL OF TEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE.

**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT ( APPROX )
PALLETTIZED UNITS	7	12,454 LBS



#### KEY NUMBERS

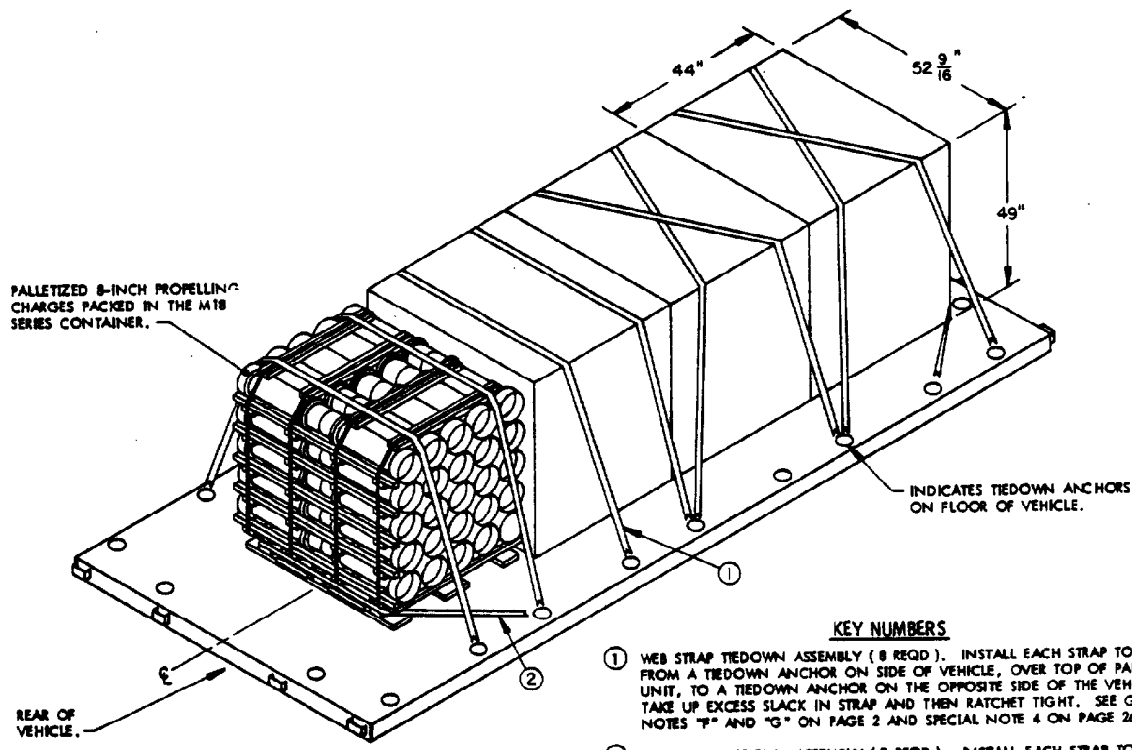
- ① WEB STRAP TIEDOWN ASSEMBLY (6 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETTIZED UNIT (5), TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND SPECIAL NOTE 4 ON PAGE 26.
- ② WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE, AND AT THE CENTER OF THE VEHICLE, AROUND THE ENDS OF BOTH LATERALLY ADJACENT PALLETTIZED UNITS, TO A TIEDOWN ANCHOR AT THE CENTER AND ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F", "G", AND "H" ON PAGE 2 AND SPECIAL NOTE 8 ON PAGE 26.
- ③ WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON END OF VEHICLE, AROUND THE ENDS OF BOTH LATERALLY ADJACENT PALLETTIZED UNITS, TO A TIEDOWN ANCHOR ON THE SAME END OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F", "G", AND "H" ON PAGE 2 AND SPECIAL NOTE 8 ON PAGE 26.

#### LOAD GUIDANCE NOTES:

1. A MAXIMUM LOAD OF FIVE PALLETS OF PROPELLING CHARGE CONTAINERS IS SHOWN ON THE TRUCK, HEAVY EXPANDED MOBILITY (HEMTT), 10-TON, M977 AND/OR M985, HAVING INSIDE DIMENSIONS OF 216-3/8" LONG BY 90-3/4" WIDE. NOTE: THE MAXIMUM LOAD IS BASED ON THE DIMENSIONS OF THE PALLETTIZED UNITS SHOWN.
2. FIVE PALLETTIZED UNITS OF 8-INCH PROPELLING CHARGES PACKED IN THE M18 SERIES CONTAINER HAVING DIMENSIONS OF 52-9/16" WIDE BY 44" LONG BY 49" HIGH ARE SHOWN AS A TYPICAL LOAD. SEE SPECIAL NOTE 6 ON PAGE 26.
3. THE PROCEDURES SHOWN ABOVE ARE FOR SECURING WIDE LOADS, CONSISTING OF TWO PALLETTIZED UNITS HAVING A LENGTH GREATER THAN 43", POSITIONED LATERALLY ADJACENT TO EACH OTHER ACROSS THE WIDTH OF THE VEHICLE, AND WHICH EXTENDS OVER THE TOP OF THE TIEDOWN ANCHORS ON EACH SIDE OF THE VEHICLE. WHEN LOADING, CENTER THE LATERALLY ADJACENT PALLETTIZED UNITS BETWEEN TWO TIEDOWN ANCHORS ON EACH SIDE OF THE VEHICLE THAT ARE FARTHER APART THAN THE PALLETTIZED UNIT WIDTH, TO WHICH THE HOLD DOWN WEB STRAPS CAN BE ATTACHED, AND WHICH WILL PROVIDE CLEARANCE BETWEEN THE PALLETTIZED UNIT AND THE STRAP RATCHET, AND BETWEEN THE SIDE WALLS OF THE VEHICLE AND THE STRAP RATCHET. SEE PAGES 29 AND 31 FOR ALTERNATIVE PROCEDURES, AND SEE SPECIAL NOTE 6 ON PAGE 26.
4. DUE TO THE SIZE OF THE PALLETTIZED UNIT AND THE LOCATION OF THE TIEDOWN ANCHORS, ONLY ONE PALLETTIZED UNIT CAN BE POSITIONED ACROSS THE WIDTH OF THE VEHICLE AT THE CENTER LOCATION AS TWO PALLETTIZED UNITS WOULD EXTEND OVER THE TIEDOWN ANCHORS ON EACH SIDE OF THE VEHICLE. THIS METHOD PROVIDES ACCESS TO TIEDOWN ANCHORS ALONG THE SIDE, AND AT THE CENTER OF THE VEHICLE, WHICH MUST BE USED FOR SECUREMENT OF THE PALLETTIZED UNITS.
5. A TOTAL OF TEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE.

#### LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLETTIZED UNITS	5	8,895 LBS



ISOMETRIC VIEW

KEY NUMBERS

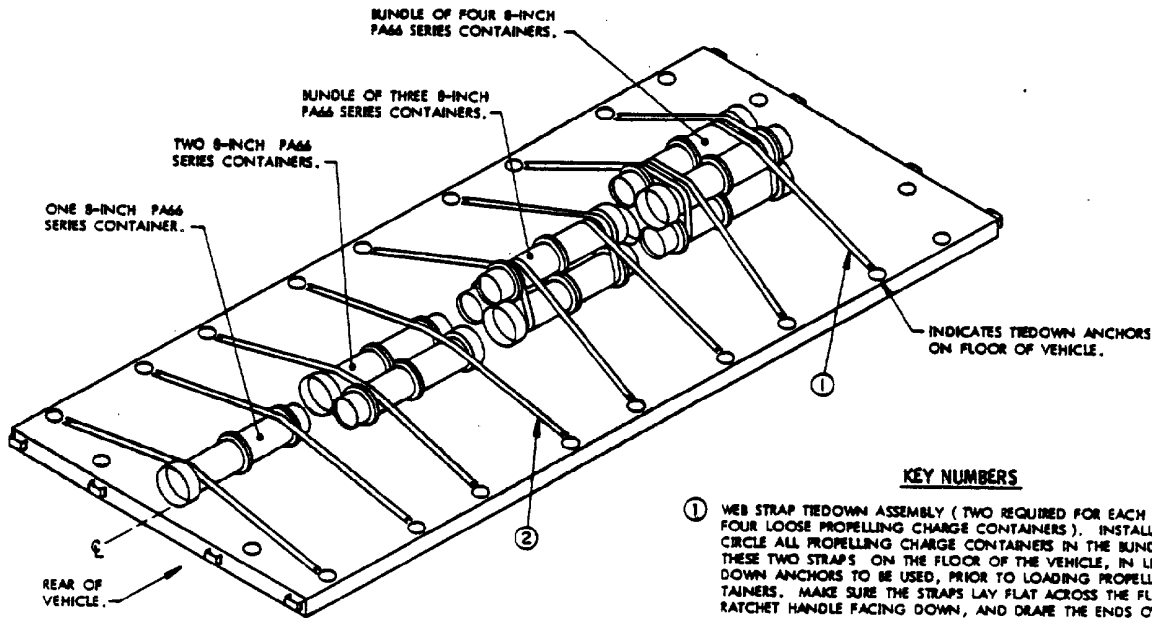
- ① WEB STRAP TIEDOWN ASSEMBLY ( 8 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETIZED UNIT, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "T" AND "G" ON PAGE 2 AND SPECIAL NOTE 4 ON PAGE 26.
- ② WEB STRAP TIEDOWN ASSEMBLY ( 2 REQD ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, AROUND END OF PALLET, AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "T" AND "G" ON PAGE 2 AND SPECIAL NOTE 8 ON PAGE 26.

LOAD GUIDANCE NOTES:

1. A LOAD OF FOUR PALLETES OF PROPELLING CHARGE CONTAINERS IS SHOWN ON THE TRUCK, HEAVY EXPANDED MOBILITY (HEMTT), 10-TON, M977 AND/OR M985, HAVING INSIDE DIMENSIONS OF 216-3/8" LONG BY 90-3/4" WIDE.
2. FOUR PALLETIZED UNITS OF 8-INCH PROPELLING CHARGES PACKED IN THE M18 SERIES CONTAINER, HAVING DIMENSIONS OF 52-9/16" WIDE BY 44" LONG BY 49" HIGH, ARE SHOWN AS A TYPICAL LOAD. IF LOADING PALLETIZED UNITS OF OTHER ITEMS, SIZES, OR QUANTITIES, THESE SAME PROCEDURES MAY BE USED.
3. THE PROCEDURES SHOWN ABOVE ARE FOR SECURING PALLETIZED UNITS HAVING A LENGTH OF 43" OR MORE, SUCH AS THE 8-INCH PALLETIZED UNIT, SHOWN ABOVE. IF THIS PALLETIZED UNIT IS POSITIONED TWO WIDE ON A HEMTT THE TIEDOWN ANCHORS ON EACH SIDE OF THE VEHICLE WILL BE COVERED UP. IF MAXIMUM LOADING IS NOT REQUIRED USE THE METHOD SHOWN ON THIS PAGE. IF MAXIMUM LOADING IS REQUIRED USE THE PROCEDURES SHOWN ON PAGES 29 OR 30. SEE SPECIAL NOTE 6 ON PAGE 26.
4. A TOTAL OF TEN WEB STRAP TIEDOWN ASSEMBLIES ARE REQUIRED FOR THE LOAD SHOWN ABOVE.

LOAD AS SHOWN

<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
PALLETIZED UNITS	4	7,116 LBS



**ISOMETRIC VIEW**

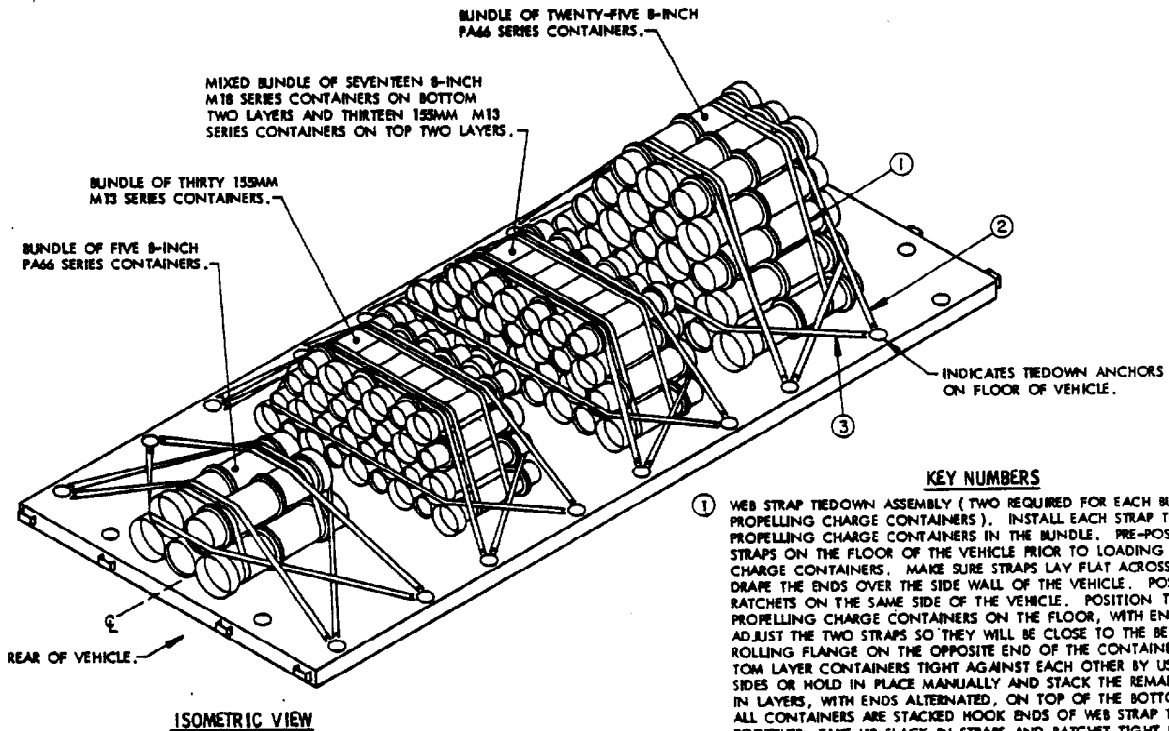
**LOAD GUIDANCE NOTES:**

1. TYPICAL METHODS FOR SECURING ONE THROUGH FOUR LOOSE PROPELLING CHARGE CONTAINERS ARE SHOWN ON THE TRUCK, HEAVY EXPANDED MOBILITY (HEMTT), 10-TON, M977 AND/OR M988, HAVING INSIDE DIMENSIONS OF 216-3/8" LONG BY 90-3/4" WIDE.
2. THE METHODS SHOWN ABOVE DEPICT SECUREMENT OF ONE, TWO, THREE, AND FOUR LOOSE, 8-INCH PA66 SERIES CONTAINERS. IF LOADING CONTAINERS OF OTHER DIMENSIONS FOLLOW THESE SAME PROCEDURES. IF LOADING FIVE OR MORE LOOSE CONTAINERS USE THE PROCEDURES SHOWN ON PAGE 33. FOR ALTERNATIVE METHODS OF SECURING LOOSE CONTAINERS USE THE PROCEDURES SHOWN ON PAGES 34 AND 35.
3. ONE AND/OR TWO CONTAINERS CAN BE SECURED WITH TWO STRAPS OVER TOP INSTALLED AS INSTRUCTED IN KEY NUMBER ② ON THIS PAGE. DO NOT USE THIS METHOD FOR MORE THAN TWO CONTAINERS AS CENTER CONTAINERS WILL SLIDE FORWARD OR REARWARD, OUT FROM UNDER THE HOLD-DOWN STRAPS MARKED ②, DURING OFF-HIGHWAY TRANSPORT. THREE AND/OR FOUR CONTAINERS MUST BE ENCIRCLED BY THE HOLD-DOWN STRAPS AS INSTRUCTED IN KEY NUMBER ① ON THIS PAGE.

**KEY NUMBERS**

- ① WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF THREE OR FOUR LOOSE PROPELLING CHARGE CONTAINERS ). INSTALL EACH STRAP TO ENCIRCLE ALL PROPELLING CHARGE CONTAINERS IN THE BUNDLE. PRE-POSITION THESE TWO STRAPS ON THE FLOOR OF THE VEHICLE, IN LINE WITH THE TIEDOWN ANCHORS TO BE USED, PRIOR TO LOADING PROPELLING CHARGE CONTAINERS. MAKE SURE THE STRAPS LAY FLAT ACROSS THE FLOOR, WITH THE RATCHET HANDLE FACING DOWN, AND DRAPE THE ENDS OVER THE SIDE WALL OF THE VEHICLE. POSITION BOTH STRAP RATCHETS ON THE SAME SIDE OF THE VEHICLE. POSITION TWO, THREE, OR FOUR LOOSE PROPELLING CHARGE CONTAINERS ON THE FLOOR, WITH ENDS ALTERNATED, AND CENTERED OVER TOP OF THE TWO STRAPS. WHILE HOLDING THE CONTAINERS IN POSITION BRING EACH END OF A STRAP UP, CROSS ENDS OVER TOP OF BUNDLE, AND ATTACH ENDS OF STRAP TO TIEDOWN ANCHORS ON SIDE OF VEHICLE. TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. NOTE: AS THESE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A COMPACT TIGHT BUNDLE. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ② WEB STRAP TIEDOWN ASSEMBLY ( 2 REQD FOR 1 OR 2 LOOSE PROPELLING CHARGE CONTAINERS ). INSTALL EACH STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, OVER TOP OF PROPELLING CHARGE CONTAINER, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS MARKED ② AT THE SAME TIME. SEE GENERAL NOTES "F" AND "G" ON PAGE 2, AND LOAD GUIDANCE NOTE 3 ON THIS PAGE.



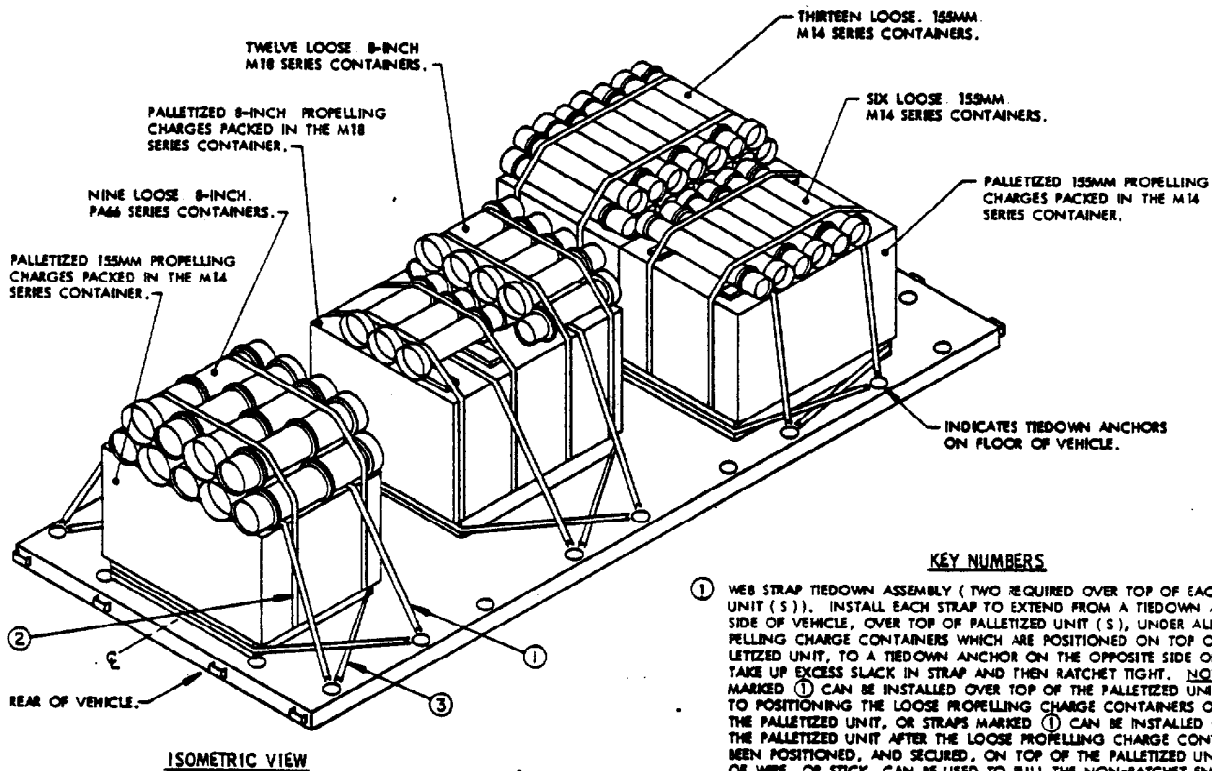


#### KEY NUMBERS

- ① WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF LOOSE PROPELLING CHARGE CONTAINERS ). INSTALL EACH STRAP TO ENIRCLE ALL PROPELLING CHARGE CONTAINERS IN THE BUNDLE. PRE-POSITION THESE TWO STRAPS ON THE FLOOR OF THE VEHICLE PRIOR TO LOADING PROPELLING CHARGE CONTAINERS. MAKE SURE STRAPS LAY FLAT ACROSS THE FLOOR AND DRAPE THE ENDS OVER THE SIDE WALL OF THE VEHICLE. POSITION BOTH STRAP RATCHETS ON THE SAME SIDE OF THE VEHICLE. POSITION THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS ON THE FLOOR, WITH ENDS ALTERNATED. ADJUST THE TWO STRAPS SO THEY WILL BE CLOSE TO THE BELL END AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE CONTAINER. KEEP THE BOTTOM LAYER CONTAINERS TIGHT AGAINST EACH OTHER BY USING WEDGES AT SIDES OR HOLD IN PLACE MANUALLY AND STACK THE REMAINING CONTAINERS, IN LAYERS, WITH ENDS ALTERNATED, ON TOP OF THE BOTTOM LAYER. AFTER ALL CONTAINERS ARE STACKED HOOK ENDS OF WEB STRAP TIEDOWN ASSEMBLIES TOGETHER, TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. NOTE: AS THE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A COMPACT TIGHT BUNDLE. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ② WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF LOOSE PROPELLING CHARGE CONTAINERS ). INSTALL EACH STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, OVER TOP OF PROPELLING CHARGE CONTAINERS, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. POSITION BOTH RATCHETS ON THE SAME SIDE OF THE VEHICLE. ATTACH WEB STRAP TIEDOWN ASSEMBLY MARKED ③ TO THE TIEDOWN ANCHOR PRIOR TO RATCHETING WEB STRAP TIEDOWN ASSEMBLIES MARKED ② TIGHT. TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS MARKED ② AT THE SAME TIME. NOTE: THESE STRAPS SHOULD ALWAYS BE POSITIONED BETWEEN THE BELL ON ONE END OF A CONTAINER AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE SAME CONTAINER. IN SOME VEHICLES, DUE TO LOCATION OF TIEDOWN ANCHORS, IT MAY BE NECESSARY TO ANGLE THESE STRAPS SLIGHTLY TO MEET THIS REQUIREMENT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ③ WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF LOOSE PROPELLING CHARGE CONTAINERS ). INSTALL STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, AROUND END OF PROPELLING CHARGE CONTAINER BUNDLE, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

#### LOAD GUIDANCE NOTES:

1. TYPICAL METHODS FOR SECURING LOOSE PROPELLING CHARGE CONTAINERS ARE 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 METHODS SHOWN ABOVE DEPICT SECUREMENT OF FIVE OR MORE LOOSE PROPELLING CHARGE CONTAINERS. IF LOADING LESS THAN FIVE LOOSE PROPELLING CHARGE CONTAINERS USE THE PROCEDURES SHOWN ON PAGE 32. IN THE TYPICAL LOAD ABOVE THERE IS ONE BUNDLE OF FIVE 8-INCH. PA66 SERIES CONTAINERS, ONE BUNDLE OF 30. 153MM M13 SERIES CONTAINERS, ONE MIXED BUNDLE OF SEVENTEEN 8-INCH M18 SERIES CONTAINERS ON BOTTOM WITH THIRTEEN 153MM. M13 SERIES CONTAINERS ON TOP, AND ONE BUNDLE OF TWENTY-FIVE 8-INCH. PA66 SERIES CONTAINERS. THE QUANTITY OF CONTAINERS WITHIN A BUNDLE MAY BE A MINIMUM OF FIVE, UP TO A QUANTITY THAT CAN BE ENCLOSED WITH ONE WEB STRAP TIEDOWN ASSEMBLY. IF LOADING LOOSE PROPELLING CHARGE CONTAINERS OF OTHER SIZES OR QUANTITIES, FOLLOW THESE SAME PROCEDURES. FOR ALTERNATIVE METHODS OF SECURING LOOSE CONTAINERS USE THE PROCEDURES SHOWN ON PAGES 34 AND 35.



ISOMETRIC VIEW

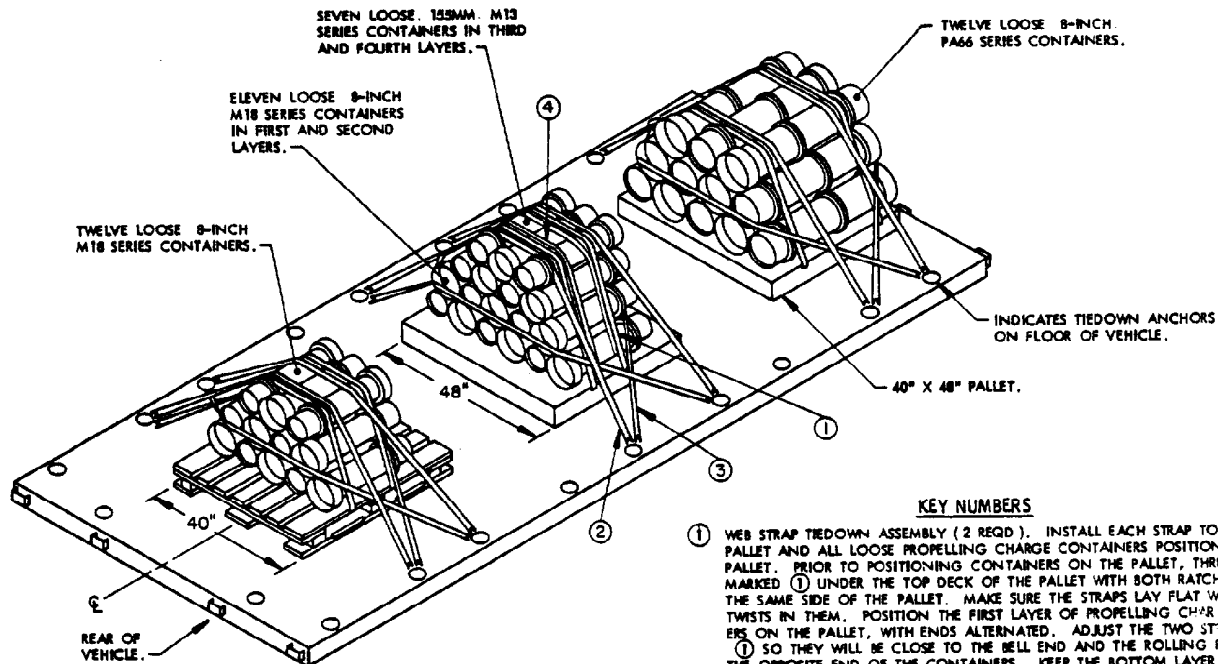
**LOAD GUIDANCE NOTES:**

1. TYPICAL METHODS FOR SECURING LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF PALLETTIZED UNITS ARE 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 METHODS SHOWN ABOVE DEPICT SECUREMENT OF LOOSE PROPELLING CHARGE CONTAINERS POSITIONED ON TOP OF PALLETTIZED UNITS WHICH ARE SECURED TO THE VEHICLE. HOLD-DOWN STRAPS MARKED ① ARE POSITIONED OVER TOP OF THE PALLETTIZED UNIT AND MUST NOT BE POSITIONED OVER TOP OF THE LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF A PALLETTIZED UNIT. SEE KEY NUMBERS ① AND ② ON THIS PAGE FOR GUIDANCE WHEN LOADING LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF PALLETTIZED UNITS. FOR ALTERNATIVE METHODS OF SECURING LOOSE PROPELLING CHARGE CONTAINERS USE THE PROCEDURES SHOWN ON PAGES 32, 33, AND 35.
3. IN THE METHODS SHOWN ABOVE THERE IS ONE PALLETTIZED UNIT OF 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER WITH NINE LOOSE 8-INCH PA66 SERIES CONTAINERS ON TOP, ONE PALLETTIZED UNIT OF 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER WITH SIX LOOSE 155MM M14 SERIES CONTAINERS ON TOP, ONE PALLETTIZED UNIT OF 155MM PROPELLING CHARGES PACKED IN THE M14 SERIES CONTAINER WITH THIRTEEN LOOSE 155MM M14 SERIES CONTAINERS ON TOP, AND ONE PALLETTIZED UNIT OF 8-INCH PROPELLING CHARGES PACKED IN THE M18 SERIES CONTAINER WITH TWELVE LOOSE 8-INCH M18 SERIES CONTAINERS ON TOP. IF LOADING PALLETTIZED UNITS AND LOOSE PROPELLING CHARGE CONTAINERS OF OTHER ITEMS, SIZES, OR QUANTITIES FOLLOW THESE SAME PROCEDURES. SEE SPECIAL NOTE 9 ON PAGE 26.
4. ALL LOOSE CONTAINERS POSITIONED ON TOP OF A PALLETTIZED UNIT MUST FORM A TIGHT BUNDLE AFTER STRAPS MARKED ② ARE RATCHETED TIGHT. IF CONTAINERS DO NOT FORM A TIGHT BUNDLE, OR IF CONTAINERS OF DIFFERENT SIZES ARE BEING POSITIONED ON TOP OF THE SAME PALLETTIZED UNIT, TWO ADDITIONAL WEB STRAP ASSEMBLIES WHICH ENIRCLE ALL LOOSE CONTAINERS WITHIN THE BUNDLE, ARE REQUIRED. SEE LOAD GUIDANCE NOTE 4 AND KEY NUMBER ④ ON PAGE 35 FOR ADDITIONAL GUIDANCE.

**KEY NUMBERS**

- ① WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED OVER TOP OF EACH PALLETTIZED UNIT ( S ) ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON SIDE OF VEHICLE, OVER TOP OF PALLETTIZED UNIT ( S ), UNDER ALL LOOSE PROPELLING CHARGE CONTAINERS WHICH ARE POSITIONED ON TOP OF THE PALLETTIZED UNIT, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. **NOTE:** STRAPS MARKED ① CAN BE INSTALLED OVER TOP OF THE PALLETTIZED UNIT ( S ) PRIOR TO POSITIONING THE LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF THE PALLETTIZED UNIT, OR STRAPS MARKED ① CAN BE INSTALLED OVER TOP OF THE PALLETTIZED UNIT AFTER THE LOOSE PROPELLING CHARGE CONTAINERS HAVE BEEN POSITIONED, AND SECURED, ON TOP OF THE PALLETTIZED UNIT. A PIECE OF WIRE, OR STICK, CAN BE USED TO PULL THE NON-RATCHET END OF THE STRAP THROUGH THE OPENING BETWEEN THE TOP OF THE PALLETTIZED UNIT AND THE BOTTOM OF THE LOOSE PROPELLING CHARGE CONTAINERS.
- ② WEB STRAP TIEDOWN ASSEMBLY ( TWO REQUIRED FOR EACH BUNDLE OF LOOSE PROPELLING CHARGE CONTAINERS ON TOP OF A PALLETTIZED UNIT ). INSTALL EACH STRAP TO ENIRCLE PALLETTIZED UNIT AND ALL LOOSE PROPELLING CHARGE CONTAINERS POSITIONED ON TOP OF THE PALLETTIZED UNIT. PRIOR TO POSITIONING LOOSE CONTAINERS ON THE PALLETTIZED UNIT, THREAD STRAPS MARKED ② UNDER THE TOP DECK OF THE PALLET WITH BOTH RATCHET ENDS ON THE SAME SIDE OF THE PALLET. MAKE SURE THE STRAPS LAY FLAT WITH NO TWISTS IN THEM. POSITION THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS ON TOP OF THE PALLETTIZED UNIT, WITH ENDS ALTERNATED. ADJUST THE TWO STRAPS MARKED ② SO THEY WILL BE CLOSE TO THE BELL END AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE LOOSE CONTAINERS. KEEP THE BOTTOM LAYER CONTAINERS TIGHT AGAINST EACH OTHER AND STACK THE REMAINING CONTAINERS, IN LAYERS, WITH THE ENDS ALTERNATED, ON TOP OF THE BOTTOM LAYER. AFTER ALL CONTAINERS ARE STACKED, BRING ENDS OF STRAPS UP OVER TOP OF LOOSE CONTAINERS AND HOOK ENDS OF STRAP TOGETHER. TAKE UP EXCESS SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. **NOTE:** AS THE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A TIGHT BUNDLE ON TOP OF THE PALLETTIZED UNIT. THE CONTAINERS MAY SEEK THEIR NATURAL POSITION DURING TRANSPORT, IF SO, CHECK STRAPS FOR TIGHTNESS AND RE-TIGHTEN IF NECESSARY. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.
- ③ WEB STRAP TIEDOWN ASSEMBLY ( 2 REQUIRED FOR PALLETTIZED UNIT ( S ) ACROSS THE WIDTH OF THE VEHICLE ). INSTALL EACH STRAP TO EXTEND FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, AROUND END OF PALLET ( S ) AS SHOWN, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP EXCESS SLACK IN STRAP AND THEN RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2.

LOOSE PROPELLING CHARGE CONTAINERS, SECURED ON TOP OF PALLETTIZED UNITS, ON A TRUCK (HEMITT), 10-TON, M977 AND/OR M985



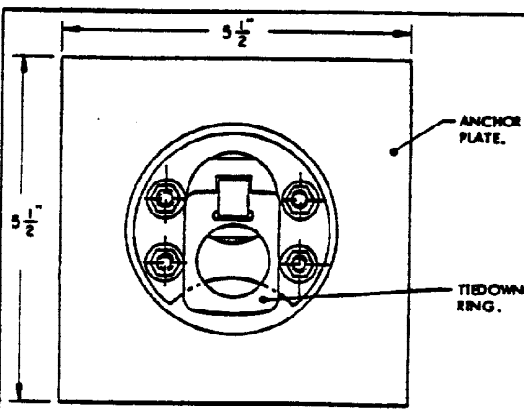
**ISOMETRIC VIEW**

**KEY NUMBERS**

- ① WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO ENIRCLE PALLET AND ALL LOOSE PROPELLING CHARGE CONTAINERS POSITIONED ON THE PALLET. PRIOR TO POSITIONING CONTAINERS ON THE PALLET, THREAD STRAPS MARKED ① UNDER THE TOP DECK OF THE PALLET WITH BOTH RATCHET ENDS ON THE SAME SIDE OF THE PALLET. MAKE SURE THE STRAPS LAY FLAT WITH NO TWISTS IN THEM. POSITION THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS ON THE PALLET, WITH ENDS ALTERNATED. ADJUST THE TWO STRAPS MARKED ① SO THEY WILL BE CLOSE TO THE BELL END AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE CONTAINERS. KEEP THE BOTTOM LAYER CONTAINERS TIGHT AGAINST EACH OTHER AND STACK THE REMAINING CONTAINERS, IN LAYERS, WITH THE ENDS ALTERNATED, ON TOP OF THE BOTTOM LAYER. AFTER ALL CONTAINERS ARE STACKED, BRING ENDS OF STRAPS UP OVER TOP OF CONTAINERS AND HOOK ENDS OF STRAP TOGETHER, TAKE UP EXCESS SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. NOTE: AS THE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A TIGHT BUNDLE ON THE PALLET. THE CONTAINERS MAY SEEK THEIR NATURAL POSITION DURING TRANSPORT, IF SO, CHECK STRAPS FOR TIGHTNESS AND RE-TIGHTEN IF NECESSARY. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND LOAD GUIDANCE NOTE 5 AT LEFT.
- ② WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, OVER TOP OF PROPELLING CHARGE CONTAINERS, TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. POSITION BOTH RATCHETS ON THE SAME SIDE OF THE VEHICLE. ATTACH WEB STRAP TIEDOWN ASSEMBLY MARKED ③ TO THE TIEDOWN ANCHOR PRIOR TO RATCHETING WEB STRAP TIEDOWN ASSEMBLIES MARKED ② TIGHT. TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS MARKED ② AT THE SAME TIME. NOTE: THESE STRAPS SHOULD ALWAYS BE POSITIONED BETWEEN THE BELL ON ONE END OF A CONTAINER AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE SAME CONTAINER. IN SOME VEHICLES, DUE TO LOCATION OF TIEDOWN ANCHORS, IT MAY BE NECESSARY TO ANGLE THESE STRAPS SLIGHTLY TO MEET THIS REQUIREMENT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND LOAD GUIDANCE NOTE 5 AT LEFT.
- ③ WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL STRAP FROM A TIEDOWN ANCHOR ON THE SIDE OF THE VEHICLE, AROUND END OF PROPELLING CHARGE CONTAINERS AS SHOWN TO A TIEDOWN ANCHOR ON THE OPPOSITE SIDE OF THE VEHICLE. TAKE UP SLACK IN STRAP AND RATCHET TIGHT. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND LOAD GUIDANCE NOTE 5 AT LEFT.
- ④ WEB STRAP TIEDOWN ASSEMBLY (2 REQD). INSTALL EACH STRAP TO ENIRCLE ALL LOOSE PROPELLING CONTAINERS IN THE BUNDLE. RE-POSITION THESE TWO STRAPS ON TOP OF THE PALLET BASE PRIOR TO LOADING THE PROPELLING CHARGE CONTAINERS. MAKE SURE STRAPS LAY FLAT ACROSS THE PALLET BASE AND DRAPE THE ENDS OVER THE SIDES. POSITION BOTH STRAP RATCHETS ON THE SAME SIDE OF THE PALLET BASE. POSITION THE FIRST LAYER OF PROPELLING CHARGE CONTAINERS ON THE PALLET BASE, WITH ENDS ALTERNATED. ADJUST THE TWO STRAPS SO THEY WILL BE CLOSE TO THE BELL END AND THE ROLLING FLANGE ON THE OPPOSITE END OF THE CONTAINER. KEEP THE BOTTOM LAYER OF CONTAINERS TIGHT AGAINST EACH OTHER AND STACK THE REMAINING CONTAINERS, IN LAYERS, WITH ENDS ALTERNATED, ON TOP OF THE BOTTOM LAYER. AFTER ALL CONTAINERS ARE STACKED, HOOK ENDS OF WEB STRAP TIEDOWN ASSEMBLIES TOGETHER, TAKE UP SLACK IN STRAPS AND RATCHET TIGHT BOTH STRAPS AT THE SAME TIME. NOTE: AS THE STRAPS ARE BEING TIGHTENED, MAKE POSITION ADJUSTMENTS TO THE CONTAINERS SO THEY FORM A COMPACT TIGHT BUNDLE. SEE GENERAL NOTES "F" AND "G" ON PAGE 2 AND LOAD GUIDANCE NOTE 4 ON THIS PAGE AND LOAD GUIDANCE NOTE 5 AT LEFT.

**LOAD GUIDANCE NOTES:**

1. TYPICAL METHODS FOR SECURING LOOSE PROPELLING CHARGE CONTAINERS ON PALLET BASES, ARE SHOWN ON THE TRUCK, HEAVY EXPANDED MOBILITY, (HEMTT), 10-TON, M977 AND/OR M985, HAVING INSIDE DIMENSIONS OF 216-3/8" LONG BY 90-3/4" WIDE.
2. THE METHODS SHOWN ABOVE DEPICT SECUREMENT OF LOOSE PROPELLING CHARGE CONTAINERS POSITIONED ON PALLET BASES. IF DESIRED, MIXED PROPELLING CHARGE CONTAINERS MAY BE POSITIONED ON THE SAME PALLET, AS SHOWN ON THE CENTER PALLET IN THE LOAD ABOVE. SEE KEY NUMBER ① ON THIS PAGE FOR GUIDANCE WHEN LOADING LOOSE PROPELLING CHARGE CONTAINERS. FOR ALTERNATIVE METHODS OF SECURING LOOSE CONTAINERS USE THE PROCEDURES SHOWN ON PAGES 32 THOROUGH 34.
3. IN THE METHODS SHOWN ABOVE THERE IS ONE 40" X 48" PALLET WITH TWELVE LOOSE 8-INCH M18 SERIES CONTAINERS SECURED ON TOP, ONE 40" X 48" PALLET WITH TWELVE LOOSE 8-INCH PA66 SERIES CONTAINERS SECURED ON TOP, AND ONE 40" X 48" PALLET WITH ELEVEN LOOSE 8-INCH M18 SERIES CONTAINERS AND SEVEN LOOSE 1.55MM M13 SERIES CONTAINERS SECURED ON TOP. IF LOADING LOOSE PROPELLING CHARGE CONTAINERS OF OTHER SIZES, OR QUANTITIES, FOLLOW THESE SAME PROCEDURES. SEE SPECIAL NOTE 9 ON PAGE 26.
4. ALL LOOSE CONTAINERS POSITIONED ON TOP OF A PALLET BASE MUST FORM A TIGHT BUNDLE AFTER STRAPS MARKED ④ ARE RATCHETED TIGHT. IF CONTAINERS DO NOT FORM A TIGHT BUNDLE, OR IF CONTAINERS OF DIFFERENT SIZES ARE BEING POSITIONED ON TOP OF THE SAME PALLET BASE, TWO ADDITIONAL WEB STRAP ASSEMBLIES MARKED ④ IN THE LOAD ABOVE, ARE REQUIRED. SEE KEY NUMBER ④ ON THIS PAGE FOR ADDITIONAL GUIDANCE.
5. THE QUANTITY OF WEB STRAPS REQUIRED IN THE KEY NUMBERS AT RIGHT APPLY TO EACH BUNDLE OF PROPELLING CHARGE CONTAINERS SHOWN IN THE VIEW ABOVE; I.E., TO TIE DOWN THE THREE BUNDLES OF CONTAINERS ABOVE, A TOTAL OF 24 WEB STRAPS WOULD BE REQUIRED.

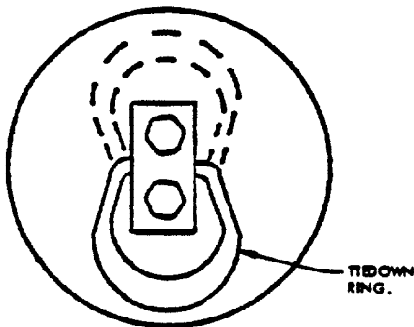


**UNIVERSAL TIEDOWN ANCHOR (FRONT VIEW)**

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

**NOTE B:**

IF THE TACTICAL VEHICLE BEING USED ARE NOT EQUIPPED WITH THE 5,000 POUND, UNIVERSAL TIEDOWN ANCHOR SHOWN AT LEFT, SEE TS 9-2300-280-30 FOR VEHICLE MODIFICATION PROCEDURES AND INSTALLATION OF THE TIEDOWN ANCHOR. WITH THE EXCEPTION OF THE HEAVY DUMPED MOBILITY TRUCK, (HEMTT) M977 AND/OR MPBS, 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 TS 9-2300-280-30. THE SEMITRAILER REQUIRES A DIFFERENT TYPE OF TIEDOWN ANCHOR.

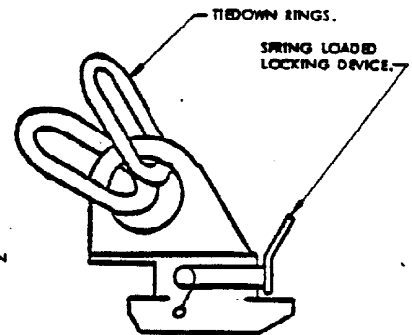


**TYPE III, FIXED TIEDOWN ANCHOR (TOP VIEW)**

THIS TIEDOWN ANCHOR IS RATED AT 10,000 POUNDS AND IS ONLY INSTALLED ON THE M127 SEMITRAILER. THERE ARE FIVE ON EACH SIDE OF THE M127 SEMITRAILER AND THEY DO NOT SWIVEL. SEE GENERAL NOTE "C" ON PAGE 2 AND SPECIAL NOTE 7 ON PAGE 6.

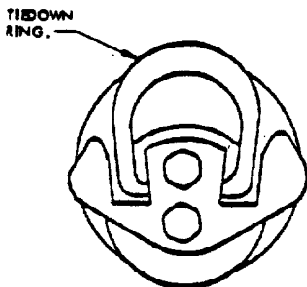
**NOTE D:**

THIS TIEDOWN ANCHOR IS RATED AT 10,000 LBS AND IS ONLY FOR USE ON THE M127 SEMITRAILER. IT IS COMMONLY REFERRED TO AS "BIG FOOT". THERE ARE LOCATIONS FOR TEN TIEDOWN ANCHORS ON EACH SIDE OF THE M127 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 "C" ON PAGE 2 AND SPECIAL NOTE 7 ON PAGE 6. THIS TIEDOWN ANCHOR IS FURTHER IDENTIFIED AS NSN 2540-01-117-3043.



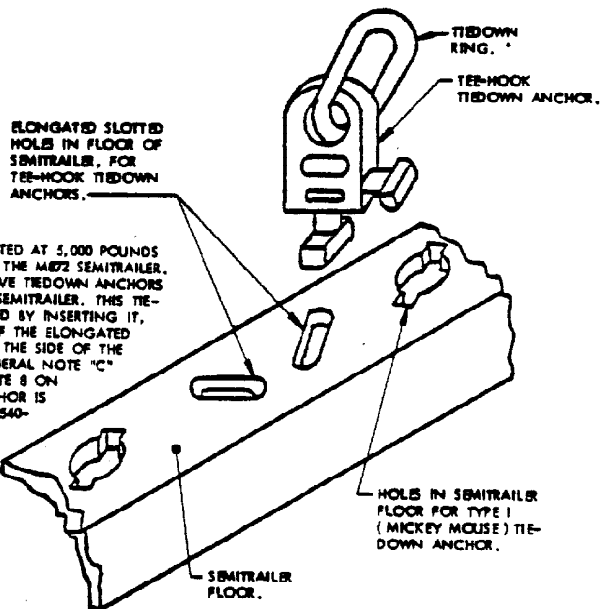
**TYPE II, REMOVABLE TIEDOWN ANCHOR (SIDE VIEW)**

(SEE "NOTE D" ABOVE)



**TYPE I, REMOVABLE TIEDOWN ANCHOR (TOP VIEW)**

THIS TIEDOWN ANCHOR IS RATED AT 10,000 POUNDS AND IS INSTALLED ON THE M127 AND M127Z SEMITRAILERS. IT IS COMMONLY REFERRED TO AS "MICKEY MOUSE". THERE ARE LOCATIONS FOR TEN TIEDOWN ANCHORS ON EACH SIDE OF THE M127 SEMITRAILER AND LOCATIONS FOR APPROXIMATELY TWENTY-EIGHT TIEDOWN ANCHORS ON EACH SIDE OF THE M127Z SEMITRAILER. THIS TIEDOWN ANCHOR IS POSITIONED BY REACHING UNDER FLOOR OF SEMITRAILER AND INSERTING THE TIEDOWN ANCHOR UP THROUGH THE HOLE AND ROTATING IT INTO POSITION. SEE GENERAL NOTE "C" ON PAGE 2 AND SPECIAL NOTES 7 AND 8 ON PAGE 4. THIS TIEDOWN ANCHOR IS FURTHER IDENTIFIED AS NSN 2540-01-112-1732.



**REMOVABLE TEE-HOOK TIEDOWN ANCHOR (ISOMETRIC VIEW)**

(SEE "NOTE A" ABOVE)

**NOTE A:**

THIS TIEDOWN ANCHOR IS RATED AT 5,000 POUNDS AND IS ONLY INSTALLED ON THE M127Z SEMITRAILER. THERE ARE LOCATIONS FOR FIVE TIEDOWN ANCHORS ON EACH SIDE OF THE M127Z 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 "C" ON PAGE 2 AND SPECIAL NOTE 8 ON PAGE 4. THIS TIEDOWN ANCHOR IS FURTHER IDENTIFIED AS NSN 2540-01-113-9285.