

APPROVED BY  
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# LOADING AND BRACING IN VAN TRAILERS EQUIPPED WITH SELF-LOADING AND TIE- DOWN EQUIPMENT OF THE 1-TON CONTAINER (FILLED)

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**DO NOT SCALE**

## GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AMCR 740-13, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. FOR DETAILS OF THE 1-TON CONTAINER SEE TM 3-250 AND PAGE 3. DIMENSIONS (APPROX) ---- 81-1/2" LONG BY 30-1/2" DIAMETER. GROSS WEIGHT ----- 3500 POUNDS (APPROX).
- C. LOADS AS SHOWN HEREIN ARE FOR CLOSED VAN TYPE SEMITRAILERS WHICH ARE 40'-0" LONG BY 92-1/2" WIDE (INSIDE DIMENSION), AND WHICH ARE EQUIPPED WITH SELF-LOADING AND TIE-DOWN EQUIPMENT. TRAILERS OF GREATER OR LESSER INSIDE DIMENSIONS CAN BE USED FOR SHIPPING THE DEPICTED LOADS. ONLY TRAILERS THAT HAVE NAILABLE FLOORS AND TIE-DOWN ANCHOR DEVICES WHICH ARE LOCATED AS DETAILED ON PAGE 5 WILL BE USED.
- D. WEB STRAP ASSEMBLIES WITH RATCHETS (TIE-DOWNS), MATERIAL HANDLING SLINGS, AND A MANUAL TO COVER OPERATION OF THE SELF-LOADING EQUIPMENT WILL BE SUPPLIED BY THE CARRIER, AND MUST MEET THE FOLLOWING MINIMUM REQUIREMENTS:
1. WEB STRAP ASSEMBLY WITH RATCHET - COMPLETE ASSEMBLY MINIMUM BREAKING STRENGTH 5,000 LBS. ASSEMBLY TO HAVE ONE (1) SAFETY HOOK ON EACH END.
  2. MATERIAL HANDLING SLING(S) - SLING(S) TO BE OF CAPACITY AND DESIGN TO MEET CRITERIA ESTABLISHED BY EXISTING DIRECTIVES. NOTE: GOVERNMENT OWNED HANDLING SLINGS MAY BE AVAILABLE AT SOME LOADING SITES.
- E. THE NUMBER OF LADING UNITS MAY BE ADJUSTED TO FIT THE SIZE OF THE TRAILER BEING LOADED OR THE QUANTITY TO BE SHIPPED.
- F. THE GROSS WEIGHT AND AXLE DISTRIBUTION OF WEIGHT FOR A LOAD WILL BE THE RESPONSIBILITY OF THE CARRIER. THE CARRIER WILL ADVISE THE SHIPPER OF THE APPLICABLE LOADING REQUIREMENTS AND THE SHIPPER WILL LOAD ACCORDINGLY. FOR ADDITIONAL LOADING GUIDANCE, SEE SPECIAL NOTE 6 ON PAGE 5.
- G. THE OUTLOADING PROCEDURES SPECIFIED HEREIN CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE DEPICTED CONTAINERS WHEN THEY ARE EMPTY. NOTE THAT THE DUNNAGING PROCEDURES SPECIFIED WITHIN THIS DRAWING ARE DESIGNED FOR THE CARRIAGE OF TWELVE (12) FILLED OR EMPTY CONTAINERS.
- H. **CAUTION:** CARE SHOULD BE EXERCISED WHEN TENSIONING WEB STRAP ASSEMBLIES. THERE MUST BE AT LEAST ONE (1) COMPLETE WRAP OF THE STRAP AROUND THE SPOOL OF THE TENSIONING RATCHET PRIOR TO EXERTION OF FORCE ON THE RATCHET HANDLE. WHEN TENSIONING, THE FREE END OF THE WEB STRAP SHOULD BE GUIDED TO LAY FLAT AND PARALLEL WITH THE STRAP UNDER TENSION TO PREVENT JAMMING OF THE RATCHET. AFTER TENSIONING OF STRAPS, ALL RATCHET HANDLES SHOULD BE PLACED IN THE CLOSED POSITION (DOWN). INSPECT LOAD PRIOR TO MOVEMENT. BE CERTAIN THERE ARE NO KINKS, TWISTS OR KNOTS IN STRAPS, AND THAT ALL SAFETY HOOKS ARE PROPERLY ENGAGED. THE LOOSE END OF ALL WEB STRAP ASSEMBLIES WILL BE FOLDED ONTO THE MAIN STRAP AND SECURED BY TYING OR TAPING IN PLACE.
- J. THE APPROXIMATE WEIGHT OF THE LOADS DELINEATED HEREIN UNDER "LOAD AS SHOWN" DOES NOT INCLUDE THE WEIGHT OF THE CARRIER-FURNISHED WEB STRAP ASSEMBLIES.
- K. PORTIONS OF THE SEMITRAILER BODIES DEPICTED WITHIN THIS DRAWING, SUCH AS ONE OF THE SIDEWALLS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- L. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 2" X 8" MATERIAL IS ACTUALLY 1-1/2" THICK BY 7-1/2" WIDE OR 1-5/8" THICK BY 7-5/8" WIDE.
- M. A STAGGERED NAILING PATTERN WILL BE USED WHEREVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES. ALSO, A STAGGERED NAILING PATTERN WILL BE USED WHEN DUNNAGE IS NAILED TO THE FLOOR OF THE TRANSPORTING VEHICLE, OR WHEN LAMINATING DUNNAGE. THE NAILING PATTERN WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL DOES NOT PENETRATE INTO OR NEAR A CRACK BETWEEN FLOOR BOARDS. ADDITIONALLY, THE NAILING PATTERN FOR AN UPPER PIECE OF LAMINATED DUNNAGE WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL FOR THAT PIECE WILL NOT BE DRIVEN THROUGH ONTO OR RIGHT BESIDE A NAIL IN A LOWER PIECE.
- N. **CAUTION:** DO NOT NAIL BLOCKING SHOWN HEREIN TO THE TRAILER WALLS. ALL NAILING WILL BE WITHIN THE DUNNAGE OR TO THE TRAILER FLOOR.
- O. THE SPECIFIED BLOCKING AND BRACING, AS PROVIDED BY THE WOODEN DUNNAGE, IS DESIGNED FOR REUSE ON SUBSEQUENT SHIPMENTS. HOWEVER, BEFORE REUSE, THE DUNNAGE ASSEMBLAGE MUST BE INSPECTED. COMPONENTS OF THE WOODEN ASSEMBLAGE THAT SHOW DAMAGE OR IMPAIRMENTS MUST BE REPLACED OR REPAIRED IN SUCH A MANNER AS TO PROVIDE EQUAL OR GREATER STRENGTH THAN THE ORIGINAL MEMBER PROVIDED.

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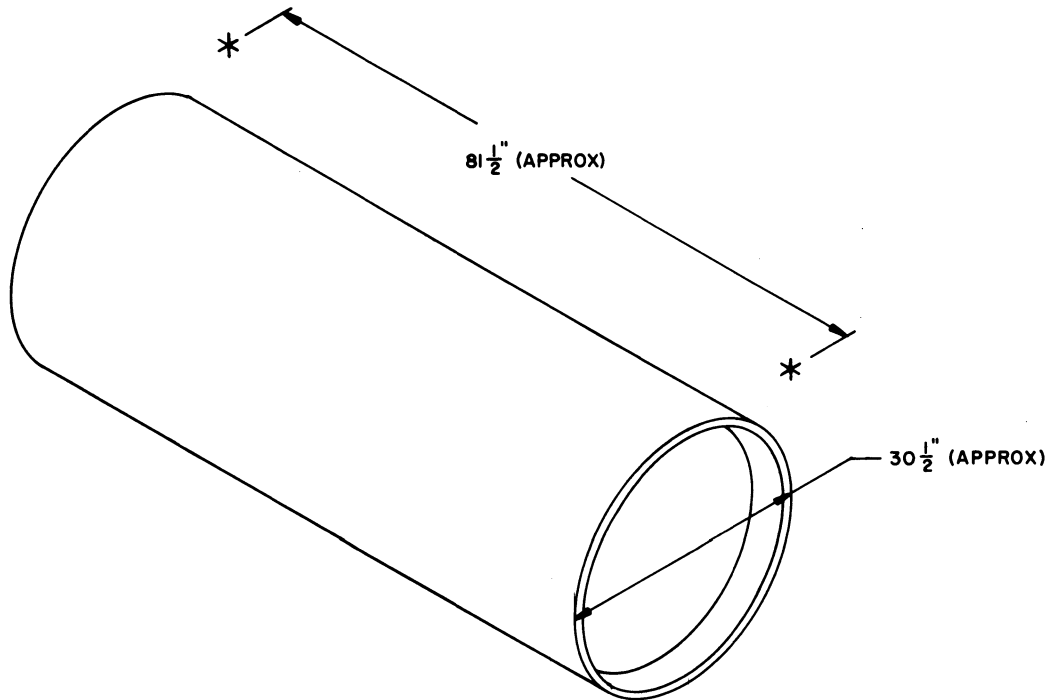
## MATERIAL SPECIFICATIONS

- LUMBER ----- : SEE TM 743-200-1, DUNNAGE LUMBER; FED SPEC MM-L-751.
- NAILS ----- : COMMON, CEMENT COATED OR CHEMICALLY ETCHED, FED SPEC FF-N-105. ALT: ANNULAR-RING TYPE NAIL OF SAME SIZE.
- CREPE RUBBER ---- : COMMERCIAL GRADE.

## (GENERAL NOTES CONTINUED)

- P. **NOTICE:** PRIOR TO RELEASE OF A LOAD OR AN EMPTY TRAILER FOR MOVEMENT, ALL UNUSED TIE-DOWN COMPONENTS AND THE SELF-LOADING EQUIPMENT MUST BE ADEQUATELY SECURED SO AS TO PREVENT IT FROM DAMAGING THE LADING ITEMS AND/OR THE TRAILER DURING THE MOVEMENT.
- Q. TRANSPORTING EQUIPMENT USED FOR SHIPPING THE LOAD DESIGNATED HEREIN MUST SATISFY THE REQUIREMENTS THAT PERTAIN TO THE TYPE OF COMMODITY INVOLVED. THESE REQUIREMENTS ARE SPECIFIED ELSEWHERE. ALSO, THE TIE-DOWN FACILITIES WHICH ARE SHOWN AS BEING A PART OF THE TRANSPORTING EQUIPMENT MUST BE DESIGNED AND ATTACHED TO THE TRANSPORTING EQUIPMENT IN SUCH A MANNER THAT RESULTANT STRENGTH AND PLACEMENT CHARACTERISTICS SATISFY THE LADING SECURING PROCEDURES SPECIFIED HEREIN.
- R. ALTHOUGH IT IS THE RESPONSIBILITY OF THE CARRIER TO FURNISH A VAN TRAILER EQUIPPED WITH SUITABLE ANCHOR DEVICES AND WEB STRAP TIE-DOWN ASSEMBLIES, AND A CERTIFICATION AS TO THEIR SUITABILITY, IT IS THE RESPONSIBILITY OF THE SHIPPER TO PERFORM VISUAL INSPECTION OF THE ANCHOR DEVICES AND THE WEB STRAP TIE-DOWN ASSEMBLIES PRIOR TO USING FOR A SHIPMENT. DEFICIENCIES NOTED DURING VISUAL INSPECTION, SUCH AS CRACKED OR BENT HARDWARE AND/OR FRAYED WEBBING THAT IMPAIR THE STRENGTH OF THE TIE-DOWN COMPONENTS, WILL BE CAUSE FOR REJECTION OF THE TRAILER EQUIPMENT AND/OR TIE-DOWN ASSEMBLIES.
- S. PRIOR TO EACH USE THE TRAILER WILL BE INSPECTED IN ACCORDANCE WITH APPLICABLE REGULATIONS AND PREVAILING POLICIES TO ASSURE THAT THE CRITERIA OF THESE REGULATIONS AND POLICIES ARE SATISFIED.
- T. ALSO, PRIOR TO EACH USE, THE SELF-LOADING CRANE EQUIPMENT WILL BE INSPECTED IN ACCORDANCE WITH THE FOLLOWING DIRECTIVES AND UNSUITABLE EQUIPMENT WILL BE REJECTED.
1. RAIL AND TRACK EXTENSIONS.
    - (A) VISUALLY INSPECT SUPPORTS, HANGERS, AND HOIST CARRIAGE STOP FOR CRACKS, BREAKS, DEFECTIVE WELDS (PAINT OVER WELDED AREAS TO BE REMOVED) AND HOLES IN CRANE RAIL EXTENSIONS, FOR ELONGATION AND EXCESSIVE WEAR. WARNING: BEFORE USE, ASSURE THAT RAIL TRACK EXTENSIONS ARE FIRMLY POSITIONED AND LOCKING PIN IS PROPERLY AND SECURELY INSERTED.
    - (B) INSPECT CABLE ATTACHED TO RAIL TRACK EXTENSIONS FOR FRAYING AND EXCESSIVE WEAR. DEFECTIVE CABLES ON RAIL TRACK EXTENSIONS ARE REPORTABLE BUT NOT CAUSE FOR REJECTION OF TRAILERS EXCEPT AS NOT BEING REPAIRED ON A TIMELY BASIS AFTER INITIAL REPORTING.
    - (C) INSPECT PIN ON END OF HANDLE (USED FOR LOCKING TRACK EXTENSIONS IN POSITION) FOR BREAKS, CRACKS, BENDS, OR EXCESSIVE WEAR.
    - (D) INSPECT PIVOTAL ASSEMBLIES OF "RAIL TRACK EXTENSIONS" FOR PRESENCE OF "DRIVE PINS" AND ELONGATION OF HOLE INTO WHICH PIN IS INSTALLED. DEFECTS ARE OF A MINOR NATURE AND REPORTABLE BUT NOT CAUSE FOR REJECTION OF THE TRAILER EXCEPT AS NOT BEING REPAIRED ON A TIMELY BASIS AFTER INITIAL REPORTING.
    - (E) INSPECT ALL PINS AND CLEVICES OF COMPLETE ASSEMBLY FOR CRACKS, BREAKS, AND EXCESSIVE WEAR.
  2. HYDRAULIC SYSTEM.
    - (A) ASSURE THAT HYDRAULIC SYSTEM RESERVOIR FOR SELF-LOADER EQUIPMENT IS NOT LESS THAN ONE-HALF FULL.
    - (B) INSPECT HYDRAULIC SYSTEM FOR LEAKS, LOOSE FITTINGS, CRACKS, BREAKS, CORRECT TYPE FITTINGS (FITTINGS OTHER THAN HYDRAULIC TYPE), WHICH MAY OTHERWISE RESULT IN A SYSTEM MALFUNCTION.
    - (C) INSPECT TAKE-UP PULLEYS FOR FREEDOM OF OPERATION, INSPECT PULLEY TRACK FOR BROKEN OR MISSING RIVETS, MISSING TAKE-UP SPRINGS, AND DEFORMATION (TO THE EXTENT THAT DEFORMATION PRECLUDES FREE MOVEMENT OF PULLEY BLOCK). CRACKS, BREAKS, OR OTHER DEFECTS WHICH WOULD CAUSE WEAR ON HOSE.
  3. WIRE ROPE.
    - (A) INSPECT WIRE ROPE ANCHORS TO ASSURE THAT ANCHORAGE IS SECURE.
    - (B) INSPECT WIRE ROPE TO ASSURE THAT NO BROKEN WIRES ARE PRESENT.
    - (C) LOWER WIRE ROPE TO LIMIT OF ROPE AND INSPECT ENTIRE LENGTH FOR KINKS AND BREAKS. CHECK PULLEY FOR FREEDOM OF OPERATION WHEN LOWERING WIRE ROPE. ANY KINKS AND/OR BROKEN WIRES WILL BE CAUSE FOR REJECTION AND REPLACEMENT WITH A SERVICEABLE WIRE ROPE.
  4. CHAIN HOIST AND CHAIN.
    - (A) INSPECT CHAIN HOIST FOR POSITIVE ASSURANCE OF ADEQUATE ANCHORAGE TO CARRIAGE STRUCTURE.
    - (B) INSPECT VARIOUS COMPONENTS AND ASSEMBLIES OF CHAIN HOIST SUCH AS SHEAVES, GEAR CASES AND HOUSINGS, AND GUARDS FOR CRACKS, BREAKS, AND EXCESSIVE WEAR.
    - (C) INSPECT PIN, WHICH SECURES DEAD END OF CHAIN TO HOIST, FOR EXCESSIVE WEAR OR DISTORTION.
    - (D) INSPECT CHAIN FOR EXCESSIVE WEAR, REDUCTION IN DIAMETER, AND APPEARANCE OF STRETCHED, BENT OR TWISTED LINKS, AND DEFECTIVE WELDS.
    - (E) DURING OPERATION, VISUALLY INSPECT DRUMS, SHEAVES, AND PULLEYS FOR SMOOTHNESS AND FREEDOM FROM SURFACE DEFECTS.

(CONTINUED ON PAGE 3)



**1-TON CONTAINER**

(GENERAL NOTES CONTINUED FROM PAGE 2)

(GENERAL NOTES CONTINUED)

**5. HOIST CARRIAGE.**

- (A) INSPECT TO ASSURE THAT RATED LOAD CAPACITY IS MARKED IN A CONSPICUOUS LOCATION ON HOIST CARRIAGE.
- (B) INSPECT HOIST CARRIAGE AXLES FOR MISSING OR LOOSE PINS IN AXLE SLEEVE.
- (C) INSPECT HOIST CARRIAGE WHEELS FOR PRESENCE OF SPRING LOCK.
- (D) INSPECT SPROCKET CHAINS FOR CRACKED OR BROKEN LINKS; INSPECT SPROCKET FOR MISSING KEYS AND BROKEN OR MISSING TEETH.
- (E) INSPECT HOIST CARRIAGE CHAIN FOR CRACKED, BENT OR BROKEN LINKS.
- (F) INSPECT FOR PRESENCE OF HOIST CARRIAGE LOCKING CHAIN AND LOAD BINDERS.
- (G) INSPECT FOR PRESENCE OF SECURING PIN AND CHAIN ON HOIST CARRIAGE.
- (H) INSPECT ELECTRICAL SYSTEM AND OPERATING HANDLE FOR DEFECTIVE WIRING, BREAKS IN CABLE, AND CUTS OR TEARS OF THE CORD.

**6. LIFTING BAR ASSEMBLIES.**

- (A) INSPECT LIFTING (AND/OR SPREADER) BAR FOR MISSING, BROKEN, CRACKED, LOOSE, DISTORTED, OR EXCESSIVELY WORN PARTS.
- (B) INSPECT ALL WELDS FOR CRACKS OR BREAKS.
- (C) INSPECT PULLEY ATTACHED TO THE LOADING BAR FOR MISSING PIN, COTTER KEYS, AND ELONGATION OF HOLE INTO WHICH THE PIN IS INSERTED.
- (D) INSPECT SWIVEL BLOCKS FOR DEFECTIVE WELDS, EXCESSIVE WEAR, AND MISSING COTTER KEY, IF NOT WELDED.

**7. ATTACHING HARDWARE.**

INSPECT ATTACHING HARDWARE, NUTS, BOLTS, SCREWS, CLEAVES AND OTHER RELATED ITEMS OF SELF-LOADER FOR SERVICEABILITY AND ASSURANCE OF PROPER ASSEMBLY.

U. BEFORE USING THE SELF-LOADING EQUIPMENT FOR A SHIPMENT, THE CRANE ASSEMBLY WILL BE LOAD TESTED BY LIFTING A TEST WEIGHT THAT WEIGHS AT LEAST 5,300 POUNDS. TESTING WILL BE ACCOMPLISHED IN ACCORDANCE WITH THE FOLLOWING DIRECTIVES, AND UNSUITABLE EQUIPMENT WILL BE REJECTED.

- 1. ASSURE THAT HOIST CARRIAGE IS AT END OF RAIL TRACK EXTENSIONS. ATTACH A ROPE TO EACH END OF TEST WEIGHT, AS REQUIRED, TO CONTROL ANY EXCESSIVE SWINGING OF TEST WEIGHT WHILE IN SUSPENSION.

(CONTINUED AT RIGHT)

- 2. ATTACH LIFTING BEAM (AND/OR SPREADER BAR) OF SELF-LOADER VAN TRAILER, SECURELY TO LOAD TEST WEIGHT. **WARNING:** ALL PERSONNEL SHALL STAND CLEAR OF THE TEST WEIGHT DURING TESTING ACTIVITIES. EQUIPMENT WHICH DOES NOT PERMIT AND/OR PROVIDE FOR AN OPERATOR TO STAND IN A SAFETY ZONE WILL BE REJECTED.

- 3. LIFT TEST WEIGHT TO A HEIGHT OF APPROXIMATELY 18 INCHES AND HOLD FOR A PERIOD OF 6 MINUTES. **WARNING:** KEEP HAND AND FEET FROM UNDER TEST WEIGHT DURING DRIFT MEASUREMENT AND ALL OTHER TIMES.

- 4. WHILE TEST WEIGHT IS SUSPENDED, MEASURE VERTICAL DISTANCE BETWEEN GROUND LEVEL AND TEST WEIGHT. CHECK FOR DRIFT OF LOAD (RATE OF DESCENT). THE MAXIMUM ALLOWABLE DRIFT IS NOT MORE THAN 3 INCHES IN 6 MINUTES.

- 5. LIFT TEST WEIGHT TO LIMIT OF TRAVEL.

- 6. LOWER TEST WEIGHT TO APPROXIMATELY 3 INCHES ABOVE FLOOR OF TRAILER.

- 7. MOVE TEST WEIGHT INTO TRAILER AS FAR AS POSSIBLE WITHOUT HITTING FORWARD WALL OF TRAILER.

- 8. TRAVERSE TEST WEIGHT LEFT AND RIGHT AS FAR AS POSSIBLE TO SIDE WALLS OF TRAILER.

- 9. CENTER TEST WEIGHT IN TRAILER AND LOWER TO FLOOR LEVEL.

- 10. LIFT TEST WEIGHT APPROXIMATELY 3 INCHES OFF THE FLOOR AND MOVE WEIGHT OUT OF TRAILER TO END OF TRACK EXTENSION.

- 11. LOWER TEST WEIGHT TO GROUND AND RELEASE LIFTING BEAM (AND/OR SPREADER BAR) FROM TEST WEIGHT.

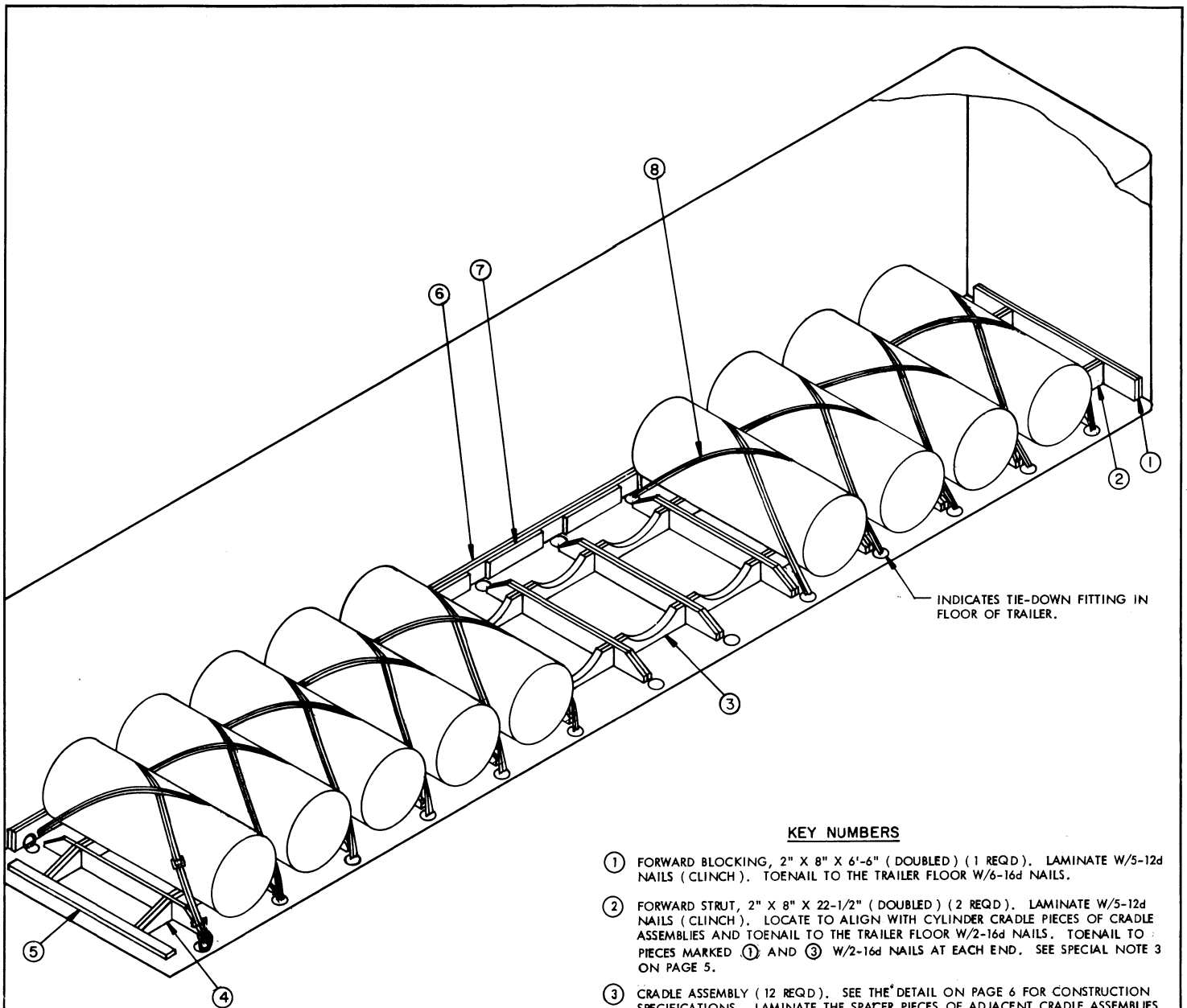
- 12. REPEAT INSPECTION IN ACCORDANCE WITH GENERAL NOTE "T".

V. A SELF-LOADING CRANE LOAD TEST WILL REMAIN VALID FOR THE PERIOD OF TIME THAT THE TRAILER REMAINS IN "CAPTIVE SERVICE". LOCAL RECORDS PERTAINING TO LOAD TESTING WILL BE MAINTAINED, USING THE TRAILER NUMBERS FOR IDENTIFICATION PURPOSES.

W. ALTHOUGH IT IS NOT RECOMMENDED, TRAILERS THAT ARE NOT EQUIPPED WITH SELF-LOADING EQUIPMENT CAN BE USED FOR SHIPPING THE DESIGNATED LADING WHICH IS LOADED, BLOCKED AND BRACED IN ACCORDANCE WITH THE OUTLOADING SPECIFICATIONS OF THIS DRAWING. IF THE LATTER TYPE TRAILER EQUIPMENT IS USED, THIS EQUIPMENT MUST CONTAIN SUITABLE TIE-DOWN WEB STRAP ASSEMBLIES AND TIE-DOWN ANCHOR DEVICES. ALSO, IT IS TO BE NOTED THAT THE WOODEN CRADLE ASSEMBLIES MUST BE INSTALLED AS LOADING PROGRESSES FROM FRONT TO REAR WITHIN A TRAILER.

X. CONTAINERS WILL BE LOADED INTO A TRAILER SO THAT THE VALVE END OF EACH WILL BE ON THE SAME SIDE OF THE TRAILER, WITH THE VALVES IN A HORIZONTAL POSITION.

**CONTAINER DETAIL**

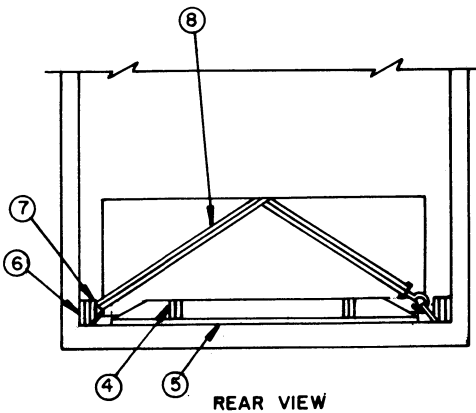


INDICATES TIE-DOWN FITTING IN FLOOR OF TRAILER.

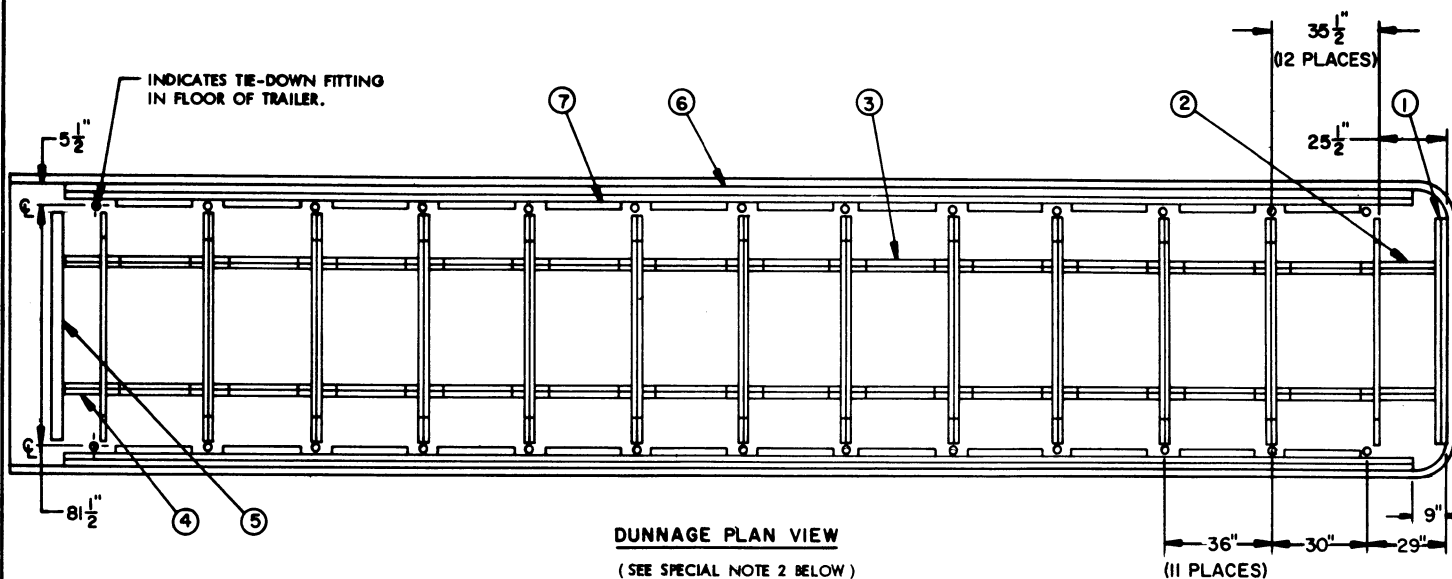
ISOMETRIC VIEW

**KEY NUMBERS**

- ① FORWARD BLOCKING, 2" X 8" X 6'-6" (DOUBLED) (1 REQD). LAMINATE W/5-12d NAILS (CLINCH). TOENAIL TO THE TRAILER FLOOR W/6-16d NAILS.
- ② FORWARD STRUT, 2" X 8" X 22-1/2" (DOUBLED) (2 REQD). LAMINATE W/5-12d NAILS (CLINCH). LOCATE TO ALIGN WITH CYLINDER CRADLE PIECES OF CRADLE ASSEMBLIES AND TOENAIL TO THE TRAILER FLOOR W/2-16d NAILS. TOENAIL TO : PIECES MARKED ① AND ③ W/2-16d NAILS AT EACH END. SEE SPECIAL NOTE 3 ON PAGE 5.
- ③ CRADLE ASSEMBLY (12 REQD). SEE THE<sup>d</sup> DETAIL ON PAGE 6 FOR CONSTRUCTION SPECIFICATIONS. LAMINATE THE SPACER PIECES OF ADJACENT CRADLE ASSEMBLIES W/5-12d NAILS (CLINCH). TOENAIL EACH CRADLE ASSEMBLY TO THE TRAILER FLOOR W/12-16d NAILS (6-16d NAILS THROUGH EACH SPACER PIECE).
- ④ REAR STRUT (2 REQD). SEE THE DETAIL ON PAGE 6 FOR CONSTRUCTION SPECIFICATIONS. ALIGN WITH CYLINDER CRADLE COMPONENTS OF REAR CRADLE ASSEMBLY AS SHOWN. TOENAIL TO THE TRAILER FLOOR W/2-16d NAILS ON ONE SIDE AND W/2-16d NAILS THROUGH THE LOWER END. TOENAIL TO THE REAR CRADLE ASSEMBLY W/2-16d NAILS AT THE HIGH END.
- ⑤ REAR HEADER, 2" X 4" X 6'-0" (1 REQD). NAIL TO THE TRAILER FLOOR W/20-12d NAILS.
- ⑥ SIDE BLOCKING, 2" X 8" X 37'-2" (DOUBLED) (2 REQD). USE RANDOM LENGTH MATERIAL AND LAMINATE W/1-12d NAIL EVERY 12" (CLINCH). TOENAIL TO THE TRAILER FLOOR W/1-16d NAIL EVERY 12".
- ⑦ BUFFER PIECE, 2" X 8" X 26" (24 REQD). NAIL TO THE SIDE BLOCKING W/3-12d NAILS. SEE SPECIAL NOTE 4 ON PAGE 5.
- ⑧ WEB STRAP ASSEMBLY WITH RATCHET (18 REQD). INSTALL FROM TIE-DOWN FITTING ON ONE SIDE OF THE TRAILER, DIAGONALLY OVER A CONTAINER TO A TIE-DOWN FITTING ON THE OTHER SIDE OF THE TRAILER. SEE SPECIAL NOTES 5 AND 6 ON PAGE 5.



REAR VIEW



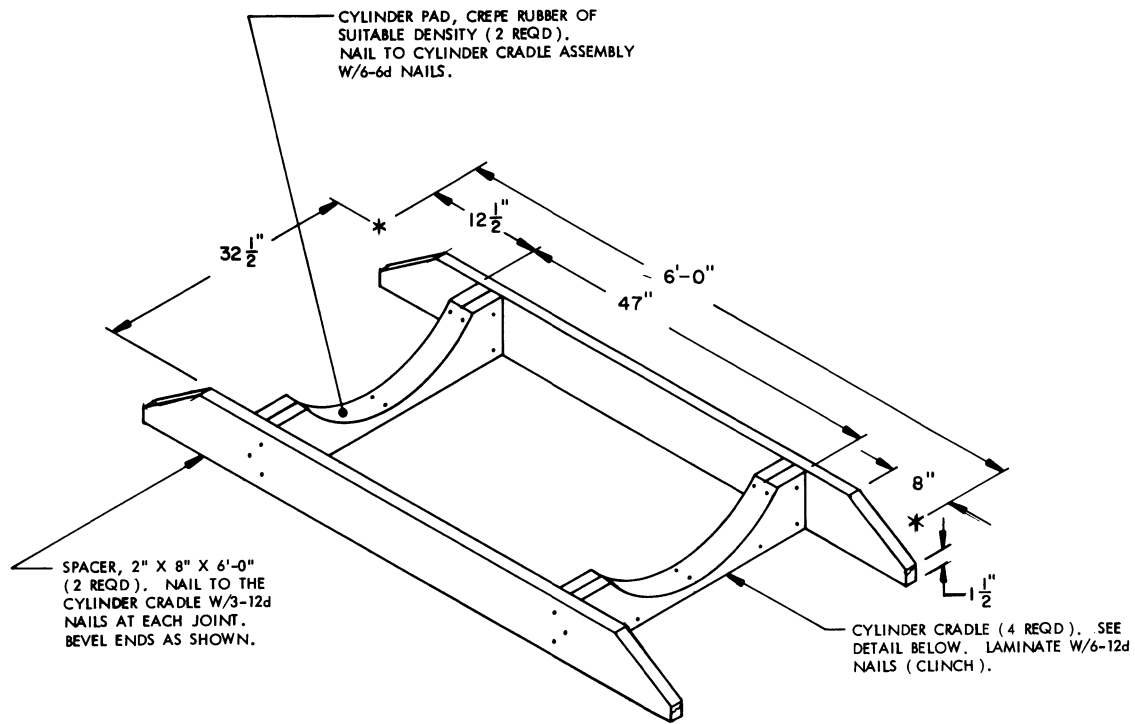
**SPECIAL NOTES:**

1. A MAXIMUM LOAD OF 9-CONTAINERS ( FILLED ) IS SHOWN IN A 40'-0" LONG TRAILER HAVING AN INSIDE WIDTH OF 7'-8-1/2". NOTE: PROVISIONS ARE MADE FOR THE SHIPMENT OF 12 EMPTY CONTAINERS.
2. EXCEPT FOR THE MOST FORWARD TIE-DOWN ANCHOR DEVICE AT EACH SIDE OF THE TRAILER, THE ANCHOR DEVICES ARE TO BE SPACED 36" APART LONGITUDINALLY. THIS SPACING IS NOT MANDATORY, HOWEVER, THE SPACING IS NOT TO BE LESS THAN 32" NOR GREATER THAN 42". CAUTION: IF ANCHOR SPACING IS DIFFERENT THAN SPECIFIED, THE LENGTH OF THE CRADLE ASSEMBLIES MUST BE ADJUSTED ACCORDINGLY. LIKEWISE, THE LATERAL SPACING WHICH IS SPECIFIED AS 81-1/2" IS NOT MANDATORY. HOWEVER, THE LATERAL SPACING BETWEEN A PAIR OF ANCHORS CANNOT BE LESS THAN 54". IF THE SPACING IS LESS THAN WHAT IS SPECIFIED, THE WIDTH OF THE SPACER PIECES ON THE CRADLE ASSEMBLIES MUST BE ADJUSTED ACCORDINGLY, PROVIDING THESE SPACER PIECES INTERFERE WITH THE PROPER INSTALLATION OF THE WEB STRAP TIE-DOWN ASSEMBLIES. THE LATERAL SPACING BETWEEN A PAIR OF DEVICES CAN BE GREATER THAN SHOWN. IF THE SPACING IS GREATER, IT MAY BE NECESSARY TO USE A SINGLE THICKNESS FOR PIECES MARKED ④ AND A DOUBLED THICKNESS FOR PIECES MARKED ⑦.
3. THE LENGTH FOR PIECES MARKED ② IS TO BE BASED ON THE LOCATION OF THE MOST FORWARD ANCHOR DEVICES. IF THE DEVICES ARE LOCATED MORE THAN 29" FROM THE FRONT WALL, THE LENGTH OF PIECES MARKED ② MUST BE ADJUSTED ACCORDINGLY. IF THE LOCATION IS LESS THAN 21", THE PIECES MARKED ② MUST BE SHORTENED TO SUIT.
4. IT IS NOT NECESSARY TO TIGHTLY BLOCK EACH 1-TON CONTAINER ACROSS THE WIDTH OF THE TRAILER. HOWEVER, IF THE TOTAL OF THE EXCESS SPACE ACROSS THE WIDTH OF THE TRAILER EXCEEDS 1-1/2", ADDITIONAL "BUFFER" OF 8" WIDE MATERIAL MUST BE LAMINATED TO THE PIECES MARKED ⑦ ON ONE OR BOTH SIDES OF THE LOAD. ADDITIONAL "BUFFER" MATERIAL OF A THICKNESS REQUIRED TO REDUCE THE EXCESSIVE AMOUNT OF UNBLOCKED SPACE WILL BE USED, AND NAILED TO PIECES MARKED ⑦ WITH SUITABLE SIZED NAILS.
5. CARE SHOULD BE EXERCISED WHEN INSTALLING AND TENSIONING WEB STRAP ASSEMBLIES TO ASSURE THAT THE WEB STRAP FORMS ITSELF TO THE CONTOUR OF THE CONTAINER USING THE SHORTEST DISTANCE BETWEEN TIE-DOWN POINTS.
6. ALTHOUGH ONLY NINE ( 9 ) CONTAINERS ARE DEPICTED IN THE LOAD ON PAGE 4, THE SPECIFIED LOADING AND BRACING PROCEDURES ARE ALSO APPLICABLE FOR SHIPPING TEN ( 10 ) THRU TWELVE ( 12 ) FILLED OR EMPTY CONTAINERS IN ONE TRAILER LOAD. IF MORE THAN NINE ( 9 ) FILLED OR EMPTY CONTAINERS ARE SHIPPED IN A LOAD, ADDITIONAL WEB STRAP ASSEMBLIES MARKED AS PIECES ①, MUST BE USED. NOTE: TWO PIECES MARKED ③ MUST BE USED TO SECURE EACH FILLED OR EMPTY 1-TON CONTAINER BEING SHIPPED.

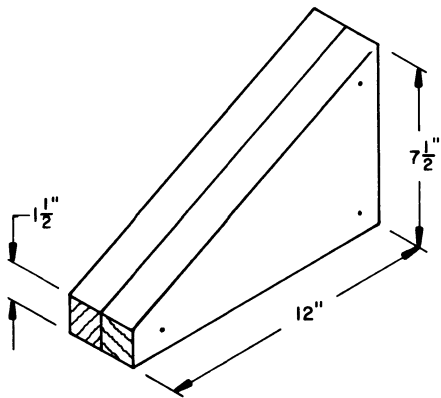
BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	6	4
2" X 8"	494	659
NAILS	NO. REQD	POUNDS
6d ( 2" )	144	1
12d ( 3-1/4" )	608	11
16d ( 3-1/2" )	248	6
CREPE RUBBER ----- AS REQD ----- NIL		

**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT ( APPROX )
1-TON CONTAINER -----	9 -----	31,950 LBS
DUNNAGE -----	1 -----	1,676 LBS
TOTAL WEIGHT -----		33,626 LBS

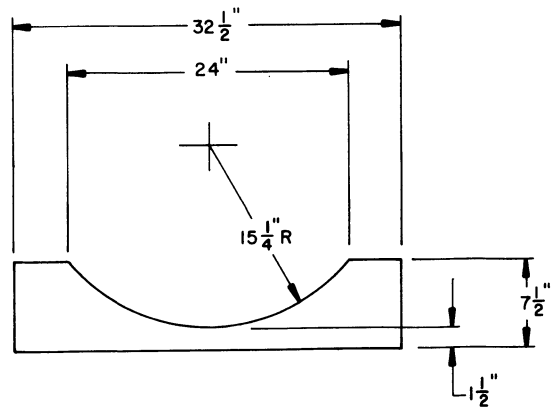


CRADLE ASSEMBLY



REAR STRUT

2" X 8" MATERIAL (DOUBLED) (2 REQD). LAMINATE W/3-12d NAILS (CLINCH).



CYLINDER CRADLE  
2" X 8" MATERIAL

DETAILS