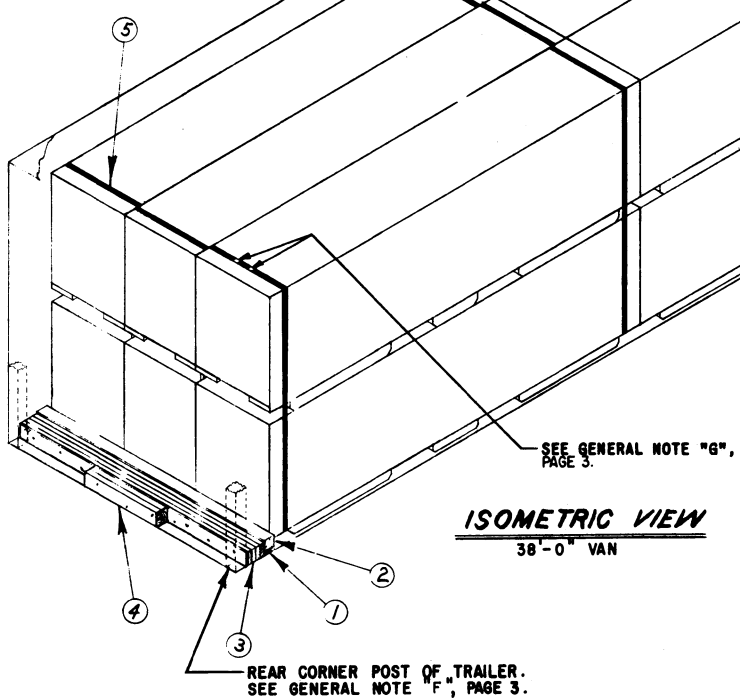
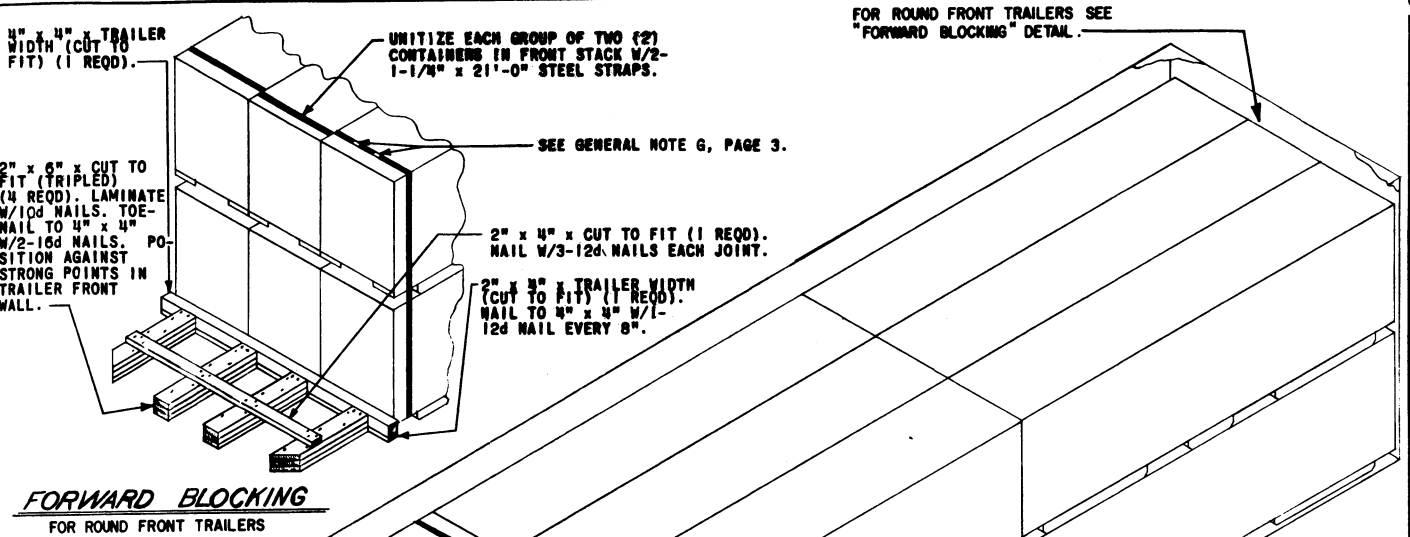


REV NO. 1 APPROVED  
 BUREAU OF EXPLOSIVES  
*A. J. Grassmuck*  
 MILITARY ASSISTANT  
 DATE 10/7/64

**LOADING & BRACING (TL & LTL) IN CLOSED OR OPEN TOP VAN TRAILER OF CONTROL SURFACE KIT, PACKED ONE PER WOODEN CONTAINER, FOR THE NIKE-HERCULES GUIDED MISSILE.**

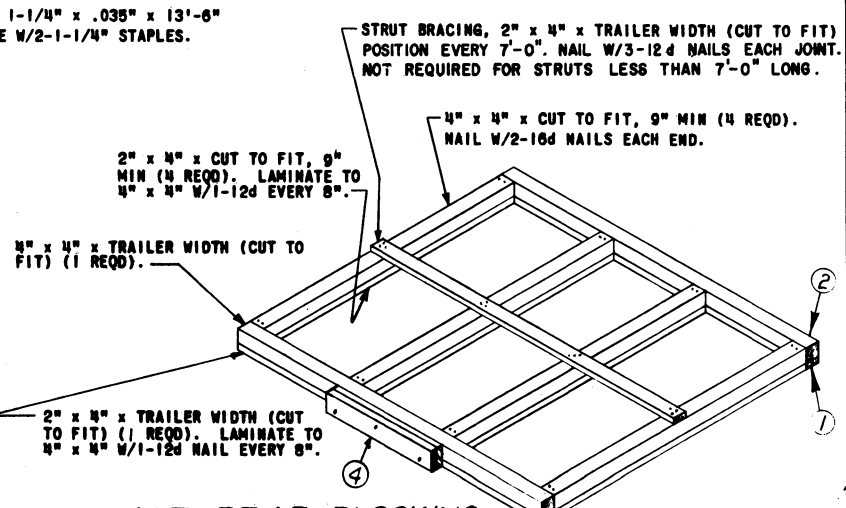
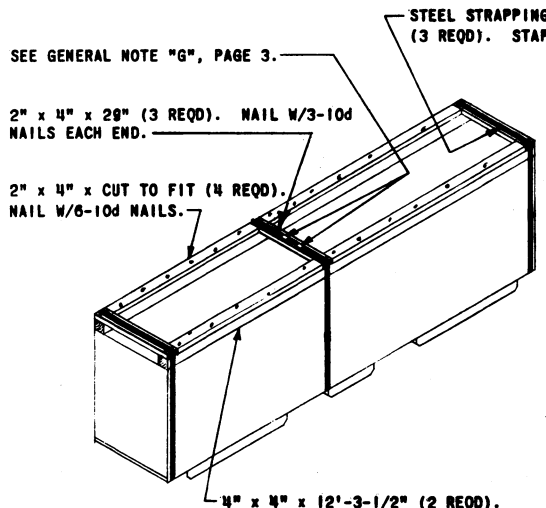
|                                                                                                                                                               |                                |                                 |                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------|
| LOADING & BRACING (TL & LTL) IN CLOSED OR OPEN TOP VAN TRAILER OF CONTROL SURFACE KIT, PACKED ONE PER WOODEN CONTAINER, FOR THE NIKE-HERCULES GUIDED MISSILE. |                                |                                 |                                                                                               |
| DESIGNED BY<br><b>E.W.M.</b>                                                                                                                                  | DESIGNED BY - SH<br><i>REG</i> | DESIGNED BY<br><b>DIW / AGE</b> | SUBMITTED<br><i>A. J. Grassmuck</i>                                                           |
| CHECKED BY<br><i>GM/P</i>                                                                                                                                     | CHECKED BY                     | CHECKED BY<br><b>AAI</b>        | APPROVED<br><i>Andrew W. Beld</i>                                                             |
| REVISIONS                                                                                                                                                     |                                |                                 | APPROVED BY ORDER OF COMMANDER, ARMY MATERIEL COMMAND<br><i>George J. Holly</i> Lt. Col. G.S. |
| 1                                                                                                                                                             | 10 APRIL 64                    | <i>Andrew W. Beld</i>           | ARMY SUPPLY & MAINTENANCE COMMAND                                                             |
|                                                                                                                                                               |                                |                                 | MATERIEL COMMAND U.S.A.                                                                       |
|                                                                                                                                                               |                                |                                 | <b>21 NOVEMBER 1957</b>                                                                       |
|                                                                                                                                                               |                                |                                 | CLASS DIVISION DRAWING FILE                                                                   |
|                                                                                                                                                               |                                |                                 | 19 48 5144 GM 11A43                                                                           |

DO NOT SCALE



**KEY NUMBERS**

- ① 2" x 4" x TRAILER WIDTH (CUT TO FIT) (1 REQD). NAIL TO ② W/ 1-12d NAIL EVERY 8".
- ② 4" x 4" x TRAILER WIDTH (CUT TO FIT) (1 REQD).
- ③ SOLID FILL, 6" WIDE x TRAILER WIDTH (CUT TO FIT) (AS REQD) (12" MAX). NAIL TO PIECE ② AND/OR SELF W/ 1-12d NAIL EVERY 12". SEE "ALT REAR BLOCKING" DETAIL, BELOW.
- ④ SOLID FILL, 6" WIDE x 36" LONG, AS REQUIRED TO FILL EXCESS SPACE BETWEEN PIECE ③ AND CLOSED DOORS, AS SHOWN. LAMINATE TO ③ AND/OR SELF W/ 1-12d NAIL EVERY 12". NOT REQUIRED FOR TRAILERS WITHOUT REAR CORNER POSTS.
- ⑤ STEEL STRAPPING, 1-1/4" x .035" x 21'-0" (6 REQD). UTILIZE EACH GROUP OF TWO (2) CONTAINERS IN REAR STACK.



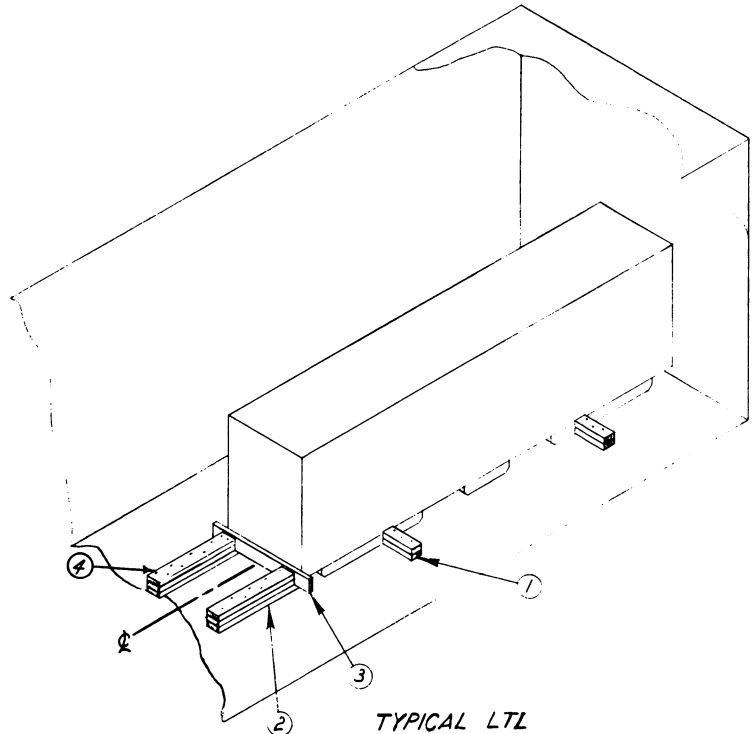
TO BE USED WHEN EXCESS SPACE AT REAR OF TRAILER IS GREATER THAN 12". IF SPACE IS 60" OR GREATER, BLOCKING AS SHOWN ON PAGE 4 MAY BE APPLIED.

**KEY NUMBERS**

- ① 2" x 4" x 12" (DOUBLED)(4 REQD). NAIL FIRST PIECE TO TRAILER FLOOR W/3-12d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER.
- ② 2" x 4" x 36" (2 REQD) TO EXTEND UNDER CONTAINER AS SHOWN. NAIL TO FLOOR W/9-12d NAILS.
- ③ 2" x 4" x 36" (1 REQD). POSITION AS SHOWN.
- ④ 2" x 4" x 30" (DOUBLED)(4 REQD). NAIL FIRST PIECE TO W/7-12d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER AND TOENAIL TO PIECE ③ W/2-12d NAILS. SEE NOTE ⑤.

**NOTE ⑤:**

TWO (2) BACKUP CLEATS SHOWN AS PIECES ② AND ④ ARE ADEQUATE FOR RETAINING A MAXIMUM LTL LOAD OF 4,000 POUNDS.



FOR WOOD OR WOOD AND METAL FLOOR TRAILERS ONLY

**GENERAL NOTES**

- A. LOAD AS SHOWN IS BASED ON A CLOSED OR OPEN TOP VAN TRAILER 38'-0" LONG x 7'-6" WIDE (INSIDE DIMENSION) WITH WOOD, WOOD AND METAL, OR METAL FLOOR.
- B. GROSS WEIGHT AND AXLE DISTRIBUTION OF WEIGHT WILL BE IN ACCORDANCE WITH PARAGRAPH 8,346.4, ORDM 3-4, VOL 3.
- C. SELECTION OF VEHICLE TO BE USED TO TRANSPORT GUIDED MISSILE AMMUNITION AND/OR COMPONENTS THEREOF, MUST COMPLY WITH AR 55-355, CHAPTER 213, FOR EXPLOSIVES OR OTHER DANGEROUS ARTICLES, IN FULL.
- D. NOTICE: A SHIPMENT WILL BE POSITIONED IN THE TRAILER CONSISTENT WITH STATE WEIGHT LAWS. THE NUMBER OF UNITS MAY BE ADJUSTED TO FIT THE DIMENSIONS OF THE VEHICLE CONCERNED OR THE QUANTITY TO BE SHIPPED; HOWEVER, THE APPROVED METHODS CONTAINED HEREIN FOR FULL OR PARTIAL TRUCKLOAD MUST BE FOLLOWED FOR BLOCKING, BRACING AND STAYING OF THIS ITEM.
- E. FOR DETAIL OF CONTAINER SEE DRAWING NO. 8524211.  
CONTAINER DIMENSIONS - 147-1/2" LONG x 29" WIDE x 42-1/8" HIGH.  
GROSS WEIGHT - 1,050 POUNDS (APPROX).
- F. FOR TRAILERS NOT EQUIPPED WITH REAR CORNER POSTS, REAR BLOCKING MUST CONTACT CLOSED DOORS.
- G. WHEN ANY STRAP IS SEALED AT AN END-OVER-END LAP JOINT, A MINIMUM OF TWO (2) SEALS WITH TWO (2) CRIMPS PER SEAL MUST BE USED.  
CAUTION: EXERCISE CARE DURING TENSIONING TO PREVENT DAMAGE TO CONTAINERS.
- H. SPECIFIED OUTLOADING PROCEDURES CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE DEPICTED CONTAINERS WHEN THEY ARE EMPTY OR LOADED WITH AN ITEM WHICH IS IDENTIFIED DIFFERENTLY BY NOMENCLATURE THAN THE ITEM DESIGNATED WITHIN THE DRAWING TITLE.
- J. FOR THE SHIPMENT OF A SMALLER LOAD IT MAY BE NECESSARY TO SUBSTITUTE A "FILLER" ASSEMBLY FOR AN OMITTED CONTAINER. SEE DETAIL, PAGE 2. INSTALL "FILLER" IN TOP LAYER OF LOAD.

**BILL OF MATERIAL**

| LUMBER                                            | LINEAL FEET | BOARD FEET |
|---------------------------------------------------|-------------|------------|
| 1" x 6"                                           | 8           | 4          |
| 2" x 4"                                           | 8           | 6          |
| 2" x 6"                                           | 21          | 21         |
| 4" x 4"                                           | 8           | 11         |
| NAILS                                             | NO. REQD    | POUNDS     |
| 12d (3-1/4")                                      | 51          | 1 LB       |
| STEEL STRAPPING, 1-1/4" x .035"--126' REQD-18 LBS |             |            |

**MATERIAL SPECIFICATIONS**

LUMBER: SEE PARAGRAPH 8400, ORDM 3-4, VOL 3.  
 NAILS: COMMON, CEMENT COATED, FED SPEC FF-N-105.  
 ALT: ANNULAR-RING TYPE NAIL OF SAME SIZE.  
 STRAPPING, STEEL: TYPE 1, CLASS "A" OR "C". FED SPEC QQ-S-781. FOR FSN SEE 38-38-100.

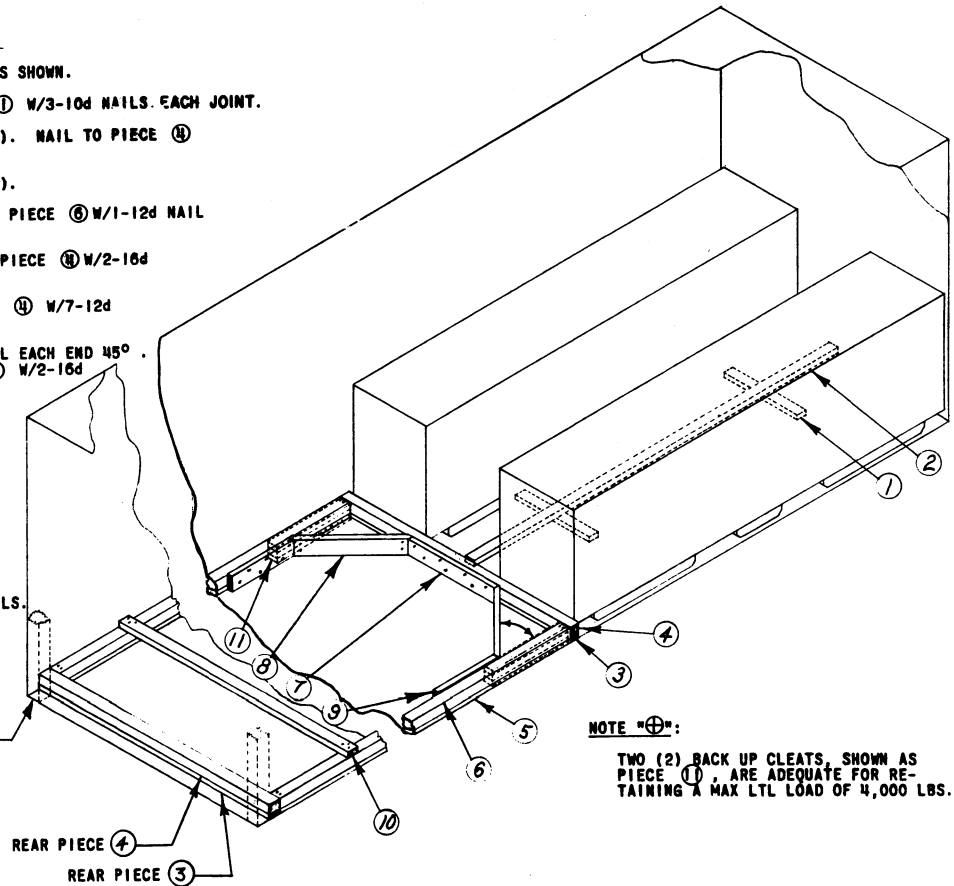
**LOAD AS SHOWN**

| ITEM                | QUANTITY | WEIGHT (APPROX)            |
|---------------------|----------|----------------------------|
| CONTROL SURFACE KIT | 18       | 18,900 LBS                 |
| DAMAGE              |          | 124 LBS                    |
| <b>TOTAL WEIGHT</b> |          | <b>19,024 LBS (APPROX)</b> |

**KEY NUMBERS**

- ① 2" x 4" x CUT TO FIT (2 REQD). POSITION AS SHOWN.
- ② 2" x 4" x 12'-0" (1 REQD). NAIL TO PIECE ① W/3-10d NAILS. EACH JOINT.
- ③ 2" x 4" x TRAILER WIDTH (CUT TO FIT)(2 REQD). NAIL TO PIECE ④ W/1-12d NAIL EVERY 8".
- ④ 4" x 4" x TRAILER WIDTH (CUT TO FIT)(2 REQD).
- ⑤ 2" x 4" x CUT TO FIT (2 REQD). LAMINATE TO PIECE ⑥ W/1-12d NAIL EVERY 8".
- ⑥ 4" x 4" x CUT TO FIT (2 REQD). TOENAIL TO PIECE ⑧ W/2-16d NAILS EACH END.
- ⑦ 2" x 6" x 34" (1 REQD). NAIL TO ③ AND/OR ④ W/7-12d NAILS.
- ⑧ 2" x 6" x CUT TO FIT (2 REQD). DOUBLE BEVEL EACH END 45°. TOENAIL TO ③ AND/OR ④ AND ⑤ AND/OR ⑥ W/2-16d NAILS EACH END.
- ⑨ 2" x 6" x 24" (2 REQD). NAIL TO ⑤ AND/OR ⑥ W/6-12d NAILS.
- ⑩ 2" x 4" x TRAILER WIDTH (CUT TO FIT) (MIN 1 REQD). POSITION EVERY 7'-0". NAIL TO ⑥ W/3-12d NAILS EACH END.
- ⑪ 2" x 4" x 30" (TRIPLED)(2 REQD). FOR WOOD OR WOOD AND METAL FLOOR TRAILERS. DELETE REAR PIECE ③ AND ④ AND PIECES ⑤ THRU ⑩. NAIL FIRST PIECE TO TRAILER FLOOR W/7-12d NAILS. NAIL EACH ADDITIONAL PIECE IN LIKE MANNER. TOENAIL TO ④ W/2-12d NAILS. SEE NOTE "⊕".

REAR CORNER POST OF TRAILER. SEE GENERAL NOTE "F", PAGE 3.



NOTE "⊕":

TWO (2) BACK UP CLEATS, SHOWN AS PIECE ①, ARE ADEQUATE FOR RETAINING A MAX LTL LOAD OF 4,000 LBS.

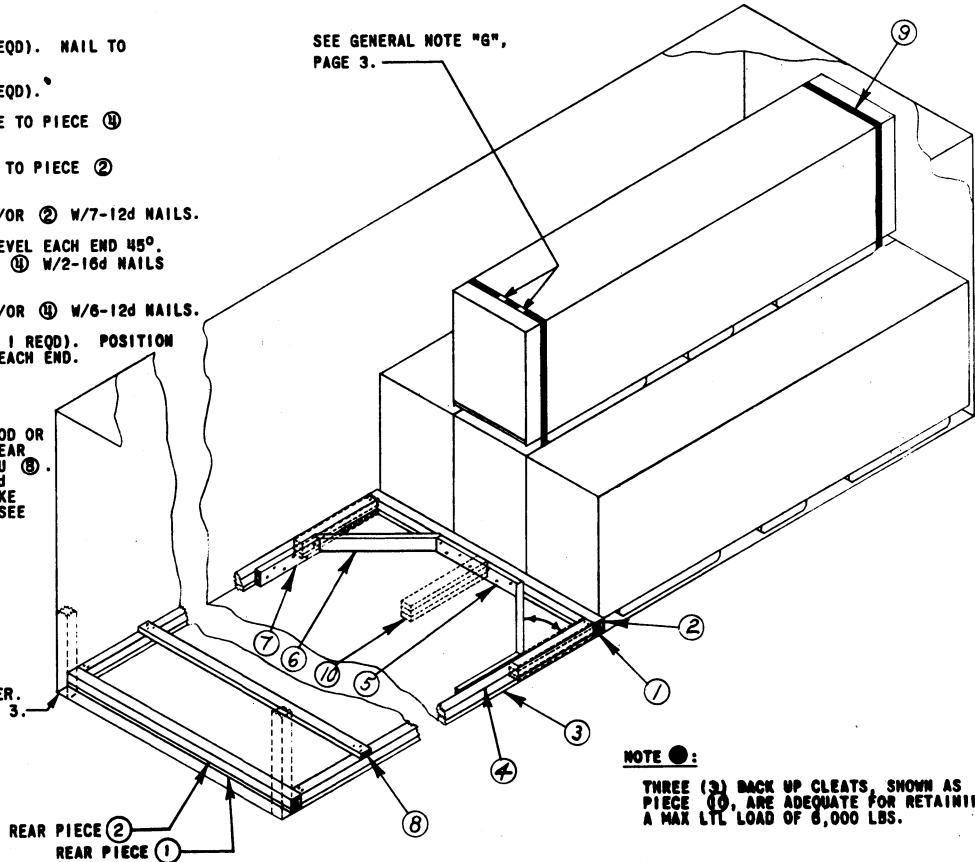
**TYPICAL LTL**

**KEY NUMBERS**

- ① 2" x 4" x TRAILER WIDTH (CUT TO FIT)(2 REQD). NAIL TO PIECE ② W/1-12d NAIL EVERY 8".
- ② 4" x 4" x TRAILER WIDTH (CUT TO FIT)(2 REQD).
- ③ 2" x 4" x CUT TO FIT (2 REQD). LAMINATE TO PIECE ④ W/1-12d NAIL EVERY 8".
- ④ 4" x 4" x CUT TO FIT (2 REQD). TOENAIL TO PIECE ② W/2-16d NAILS EACH END.
- ⑤ 2" x 6" x 34" (1 REQD). NAIL TO ① AND/OR ② W/7-12d NAILS.
- ⑥ 2" x 6" x CUT TO FIT (2 REQD). DOUBLE BEVEL EACH END 45°. TOENAIL TO ① AND/OR ② AND ③ AND/OR ④ W/2-16d NAILS EACH END.
- ⑦ 2" x 6" x 24" (2 REQD). NAIL TO ③ AND/OR ④ W/6-12d NAILS.
- ⑧ 2" x 4" x TRAILER WIDTH (CUT TO FIT)(MIN 1 REQD). POSITION EVERY 7'-0". NAIL TO ④ W/3-12d NAILS EACH END.
- ⑨ STEEL STRAPPING, 1-1/4" x .035" x 21'-0" (2 REQD).
- ⑩ 2" x 4" x 30" (TRIPLED)(3 REQD). FOR WOOD OR WOOD AND METAL FLOOR TRAILERS. DELETE REAR PIECES ① AND ② AND PIECES ③ THRU ⑧. NAIL FIRST PIECE TO TRAILER FLOOR W/7-12d NAILS. NAIL EACH ADDITIONAL PIECE IN LIKE MANNER. TOENAIL TO ② W/2-12d NAILS. SEE NOTE "●".

SEE GENERAL NOTE "G", PAGE 3.

REAR CORNER POST OF TRAILER. SEE GENERAL NOTE "F", PAGE 3.



NOTE "●":

THREE (3) BACK UP CLEATS, SHOWN AS PIECE ⑩, ARE ADEQUATE FOR RETAINING A MAX LTL LOAD OF 6,000 LBS.

**TYPICAL LTL**