

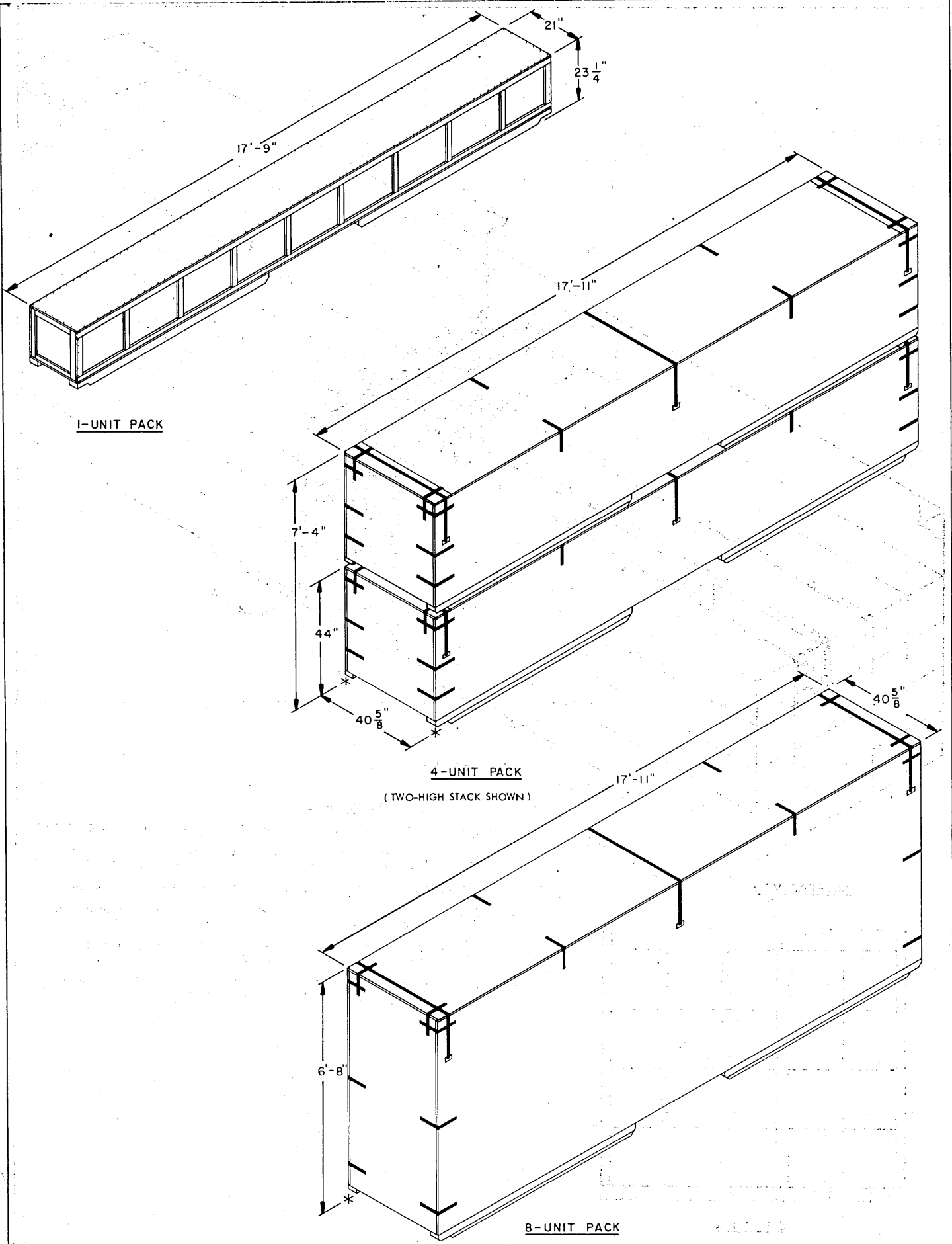
GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AMCR 740-13, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE OUTLOADING PROCEDURES SPECIFIED ARE APPLICABLE TO THE MAIN ASSEMBLAGE FOR THE BALLISTIC AERIAL TARGET SYSTEM (BATS), IN SHIPPING CONTAINERS OF 1-UNIT, 4-UNIT AND 8-UNIT PACKS. SUBSEQUENT REFERENCE TO CONTAINER MEANS THE CONTAINER WITH CONTENTS.
- C. FOR DETAILS OF THE 1-UNIT PACK SEE THE PICTORIAL VIEW ON PAGE 3.
CONTAINER DIMENSIONS ----- 213" LONG X 21" WIDE X 23-1/4" HIGH.
GROSS WEIGHT ----- 460 POUNDS (APPROX).
- D. FOR DETAILS OF THE 4-UNIT PACK SEE THE PICTORIAL VIEW ON PAGE 3.
CONTAINER DIMENSIONS ----- 215" LONG X 40-5/8" WIDE X 44" HIGH.
GROSS WEIGHT ----- 1,625 POUNDS (APPROX).
- E. FOR DETAILS OF THE 8-UNIT PACK SEE THE PICTORIAL VIEW ON PAGE 3.
CONTAINER DIMENSIONS ----- 215" LONG X 40-5/8" WIDE X 80" HIGH.
GROSS WEIGHT ----- 2,840 POUNDS (APPROX).
- F. THE OUTLOADING PROCEDURES DEPICTED ON PAGES 4 THROUGH 19 ARE BASED ON CONVENTIONAL BOX CARS OF VARIOUS LENGTHS AND WIDTHS. PAGES 20 THROUGH 25 SPECIFY PROCEDURES FOR CUSHIONED BOX CARS EQUIPPED WITH LOAD DIVIDER BULKHEADS. ALL METAL CARS, IF EQUIPPED WITH NAILABLE FLOORS, CAN BE USED EXCEPT FOR THE LOAD DEPICTED ON PAGE 6 WHICH REQUIRES NAILABLE END-WALLS. NOTICE: DUE TO THE LENGTH OF THE CONTAINERS DEPICTED HEREIN, IT IS REQUIRED, FOR FULL LOAD SHIPMENTS, THAT 40'-6" LONG CARS, WHETHER CONVENTIONAL CARS OR CARS EQUIPPED WITH LOAD DIVIDER BULKHEADS, HAVE STAGGERED DOOR OPENINGS AT LEAST 12'-0" WIDE OR THROUGH DOOR OPENINGS NOT LESS THAN 16'-0" WIDE. ALSO, CARS 50'-6" LONG MUST HAVE 10'-6" MINIMUM WIDE THROUGH DOOR OPENINGS OR STAGGERED DOOR OPENINGS. HOWEVER, FOR SHIPMENT OF A LOAD OF 1-UNIT PACKS IN A 50'-6" LONG CONVENTIONAL BOX CAR, AS SHOWN ON PAGE 6, IT IS RECOMMENDED THAT THE CAR BE EQUIPPED WITH STAGGERED DOOR OPENINGS NOT LESS THAN 12'-0" WIDE OR 16'-0" WIDE THROUGH DOOR OPENINGS TO PERMIT LOADING THE CONTAINERS INTO THE CAR AFTER THE SPECIFIED END-OF-CAR BLOCKING HAS BEEN INSTALLED. ADDITIONALLY, THE USE OF CUSHIONED BOX CARS EQUIPPED WITH LOAD DIVIDER BULKHEADS MUST SATISFY THE SPECIFICATIONS CONTAINED IN THE SPECIAL NOTES ON PAGE 21. SEE THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO DEPICTED OUTLOADING METHODS FOR FURTHER GUIDANCE.
- G. THE SELECTION OF RAIL CARS FOR THE TRANSPORT OF THE DESIGNATED ITEMS IS THE RESPONSIBILITY OF THE SHIPPER. ONLY CARS WHICH HAVE "SOUND" FLOORS AND WALLS AND ARE IN OTHERWISE PROPER CONDITION TO SAFELY TRANSPORT THE LADING TO DESTINATION WITHOUT DAMAGE WILL BE SELECTED.
- H. NOTICE: A SHIPMENT WILL BE POSITIONED IN A RAIL CAR IN COMPLIANCE WITH THE WEIGHT DISTRIBUTION REQUIREMENTS OF THE AAR. THE APPROVED METHODS FOR THE LOADS SPECIFIED MUST BE FOLLOWED. THE NUMBER OF UNITS MAY BE ADJUSTED TO FIT THE SIZE OF THE CAR TO BE LOADED OR THE QUANTITY TO BE SHIPPED. FOR A LOAD QUANTITY OTHER THAN SPECIFIED, THE APPROVED METHODS FOR BLOCKING, BRACING, AND STAYING MUST BE FOLLOWED AS CLOSELY AS POSSIBLE. THESE PROCEDURES CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE CONTAINERS WHEN THEY ARE LOADED WITH AN ITEM OTHER THAN THE SPECIFIED MAIN ASSEMBLAGE, OR WHEN THEY ARE EMPTY.
- J. LOADS AS SHOWN ARE BASED ON CARS WHICH HAVE DOORS OF THE CONVENTIONAL SLIDING TYPE. THE DEPICTED OUTLOADING PROCEDURES ALSO APPLY TO CARS WHICH ARE EQUIPPED WITH PLUG DOORS. NO SPECIAL CHANGES TO THE SPECIFIED PROCEDURES ARE REQUIRED IN THE DOORWAY AREA. CAUTION: DUNNAGE MATERIAL MUST NOT BE NAILED TO ANY PLUG DOOR, WHETHER AUXILIARY OR MAIN, EXCEPT TO A NAILING STRIP IF A DOOR IS SO EQUIPPED, FOR SECURING SUCH ITEMS AS GATE HOLD DOWN OR DOORWAY SPANNER DUNNAGE. ALSO, AFTER THE PLUG DOORS ON A CAR ARE CLOSED AND READY FOR INSTALLATION OF "CAR SEALS", A PIECE OF WIRE OF SUITABLE SIZE WILL BE USED IN ADDITION TO, AND IN CONJUNCTION WITH, EACH CAR SEAL USED TO "SEAL" THE CAR. THE WIRE WILL BE THREADED THROUGH THE HOLES IN THE DOOR LATCH ASSEMBLY ONE OR MORE TIMES, AND THE WIRE ENDS WILL BE TWISTED TOGETHER.
- K. OTHER TYPES OF LADING ITEMS MAY BE LOADED IN A CAR WHICH IS PARTIALLY LOADED WITH THE DESIGNATED ITEMS, PROVIDING THE TOTAL LOAD IS COMPATIBLE, EXISTING DIRECTIVES ARE NOT VIOLATED, AND THE OTHER LADING ITEMS ARE BLOCKED AND BRACED TO EQUAL THE BLOCKING AND BRACING CRITERIA SPECIFIED HEREIN.
- L. IF THE CAR BEING USED FOR A SHIPMENT IS EQUIPPED WITH A NAILABLE METAL FLOOR AND A NAIL SIZE FOR FLOOR NAILING IS MARKED ON THE SIDE WALL OF THE CAR, THAT GUIDANCE SHOULD BE APPLIED FOR THE NAILING OF THE APPLICABLE DUNNAGE PIECES. IF THE NAIL SIZE IS NOT SPECIFIED IN THE CAR, 30d NAILS SHOULD BE USED IN LIEU OF THOSE SPECIFIED IN THE KEY NUMBERS.
- M. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE 2" X 4" MATERIAL IS ACTUALLY 1-1/2" THICK BY 3-1/2" WIDE OR 1-5/8" THICK BY 3-5/8" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE OR 1-5/8" THICK BY 5-5/8" WIDE.
- N. THROUGHOUT THIS PROCEDURAL DRAWING PORTIONS OF THE BLOCKING COMPONENTS AND OF THE DEPICTED CARS, SUCH AS A CAR SIDE WALL, HAVE BEEN OMITTED FROM THE LOAD VIEWS FOR CLARITY PURPOSES.
- O. NOTICE: A STAGGERED NAILING PATTERN WILL BE USED WHEREVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES. ALSO, A STAGGERED NAILING PATTERN WILL BE USED WHEN DUNNAGE IS NAILED TO THE FLOOR OR SIDEWALL 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 OR SIDEWALL 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.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

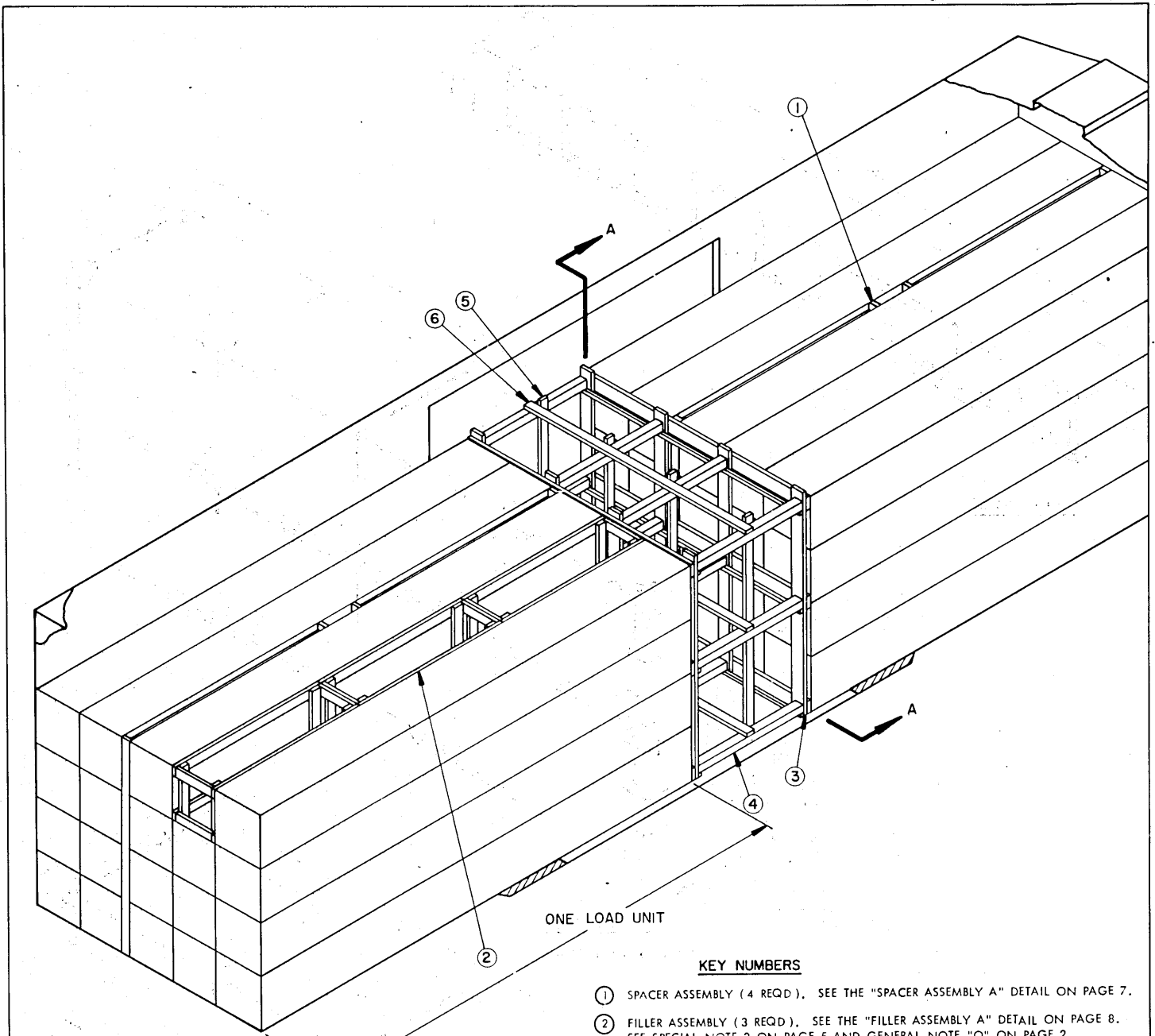
- LUMBER** -----: SEE TM 743-200-1, DUNNAGE LUMBER; FED SPEC MM-L-751.
- NAILS** -----: COMMON, CEMENT COATED OR CHEMICALLY ETCHED,
FED SPEC FF-N-105.
ALT: ANNULAR-RING TYPE NAIL OF THE SAME SIZE.
- WIRE** -----: ANNEALED, BLACK; REF: FED SPEC QQ-W-461.



1-UNIT PACK

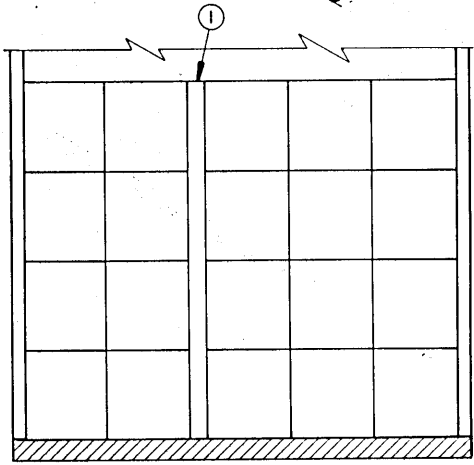
4-UNIT PACK
(TWO-HIGH STACK SHOWN)

8-UNIT PACK



ONE LOAD UNIT

ISOMETRIC VIEW



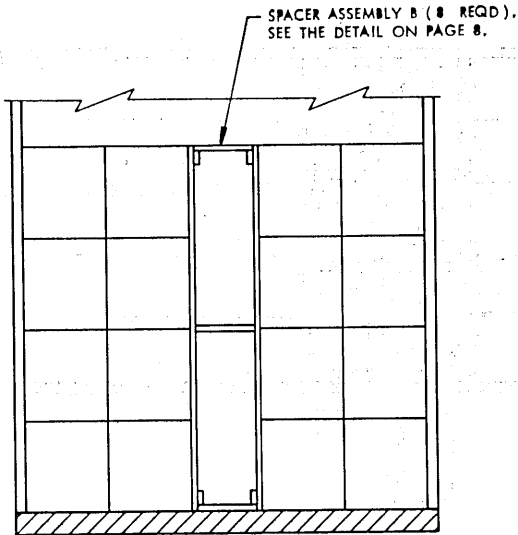
SECTION A-A

KEY NUMBERS

- ① SPACER ASSEMBLY (4 REQD). SEE THE "SPACER ASSEMBLY A" DETAIL ON PAGE 7.
- ② FILLER ASSEMBLY (3 REQD). SEE THE "FILLER ASSEMBLY A" DETAIL ON PAGE 8. SEE SPECIAL NOTE 2 ON PAGE 5 AND GENERAL NOTE "O" ON PAGE 2.
- ③ CENTER GATE (2 REQD). SEE THE "END/CENTER GATE A" DETAIL ON PAGE 7.
- ④ STRUT, 4" X 4" BY CUT TO FIT (1/2 REQD). TOENAIL TO THE VERTICAL PIECES OF THE CENTER GATES MARKED ③ W/3-16d NAILS AT EACH END.
- ⑤ VERTICAL STRUT BRACING, 2" X 4" X 8'-0" (4 REQD). NAIL TO STRUTS MARKED ④ W/3-10d NAILS AT EACH JOINT.
- ⑥ LATERAL STRUT BRACING, 2" X 4" BY LENGTH TO SUIT (3 REQD). NAIL TO STRUTS MARKED ④ W/3-10d NAILS AT EACH JOINT.

SPECIAL NOTES:

1. A 39-CONTAINER LOAD OF THE 1-UNIT PACK IS SHOWN IN A 40'-6" LONG BY 9'-2" WIDE (INSIDE DIMENSION) BOX CAR EQUIPPED WITH 12'-0" WIDE STAGGERED DOORS OF THE CONVENTIONAL SLIDING OR PLUG TYPE. WIDER CARS MAY BE USED. SEE GENERAL NOTES "F" AND "J" ON PAGE 2 AND NOTES 3 AND 4 BELOW.
2. IF A BOX CAR OF THE SIZE SHOWN FOR THE LOAD DEPICTED ON PAGE 4 IS TO BE LOADED, IT WILL BE NECESSARY TO OMIT ONE CONTAINER FROM THE TOP LAYER OF THE LOAD, AS SHOWN, BECAUSE AVAILABLE SPACE WILL NOT ALLOW FOR ITS PLACEMENT INTO THE LOAD. FILLER ASSEMBLIES, AS SPECIFIED, MUST BE USED IN THE PLACE OF THE OMITTED CONTAINER. HOWEVER, IF THE INSIDE HEIGHT OF THE CAR, THE DOOR OPENING HEIGHT AND THE AVAILABLE MATERIALS HANDLING EQUIPMENT PERMITS, AN ADDITIONAL CONTAINER MAY BE SHIPPED IN LIEU OF USING "FILLER ASSEMBLIES". ALSO, IF THE DOOR OPENING HEIGHT IS AT LEAST 10'-0" AND THE MATERIALS HANDLING EQUIPMENT PERMITS, IT IS POSSIBLE TO SHIP A 5-LAYER LOAD OF 49 CONTAINERS. FOR SHIPMENT OF A 5-LAYER LOAD, THE HEIGHT OF PIECES MARKED ①, ③ AND ⑤ MUST BE INCREASED ACCORDINGLY. ALSO, FOUR (4) ADDITIONAL STRUTS MARKED ④ AND ONE (1) ADDITIONAL LATERAL BRACING PIECE MARKED ⑥ MUST BE PROVIDED.
3. THE DEPICTED PROCEDURES ALSO APPLY TO THE SHIPMENT OF A 32-CONTAINER LOAD IN AN 8'-6" WIDE CAR. SEE "DETAIL A" AT LEFT FOR "SPACER ASSEMBLIES" REQUIRED.
4. IF A 50'-6" LONG CAR IS OFFERED FOR SHIPMENT OF THE DEPICTED LOAD, PROCEDURES SPECIFIED ON PAGE 6 MUST BE USED.
5. IF A LESS-THAN-FULL QUANTITY OF CONTAINERS IS TO BE SHIPPED, ADDITIONAL "FILLER ASSEMBLIES" MAY BE USED IN THE PLACE OF EACH OMITTED CONTAINER IN THE TOP LAYER, OR AN ENTIRE LAYER MAY BE OMITTED. "FILLER ASSEMBLIES" MAY ONLY BE USED IN THE TOP LAYER.
6. FOR CARS EQUIPPED WITH LOAD DIVIDER BULKHEADS SEE PROCEDURES SPECIFIED ON PAGES 20 AND 21.



DETAIL A

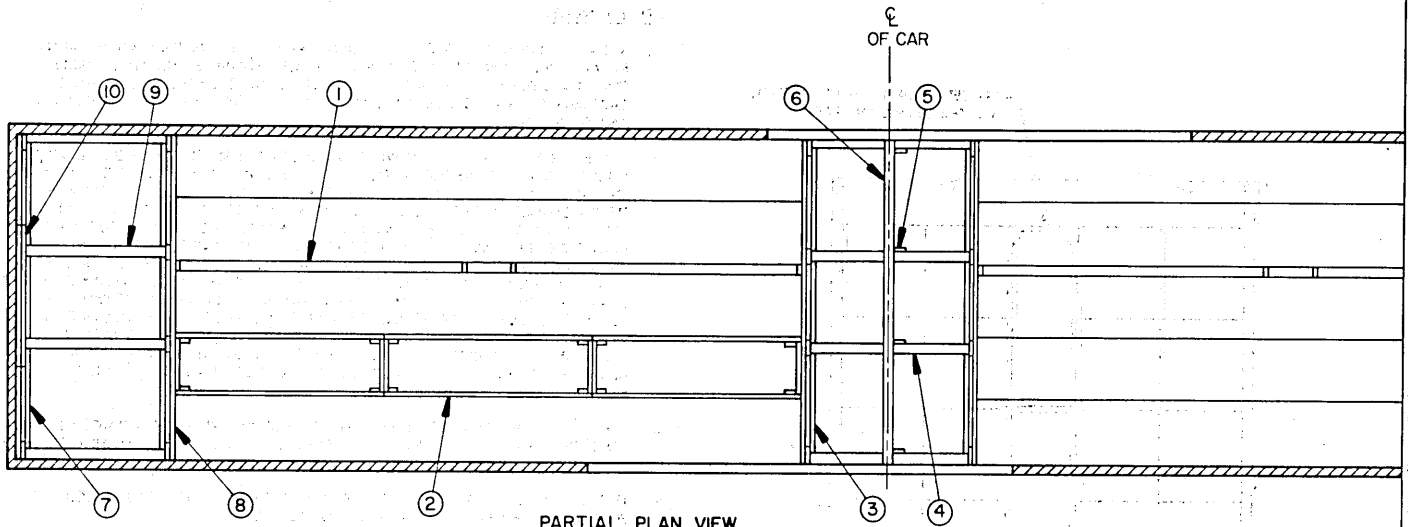
THE VIEW SHOWN ABOVE DEPICTS A 4-CONTAINER WIDE LOAD IN AN 8'-6" WIDE CAR. IN LIEU OF "SPACER ASSEMBLY A", PIECES MARKED ① ON PAGE 4, USE "SPACER ASSEMBLY B" AS DETAILED ON PAGE 8 (8 REQD.).

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 2"	55	19
2" X 4"	338	226
2" X 6"	119	119
4" X 4"	54	72
NAILS	NO. REQD	POUNDS
10d (3")	372	5-3/4
12d (3-1/4")	48	1
16d (3-1/2")	48	1-1/4

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
1-UNIT PACK	39	17,940 LBS
DUNNAGE		1,098 LBS
TOTAL WEIGHT		19,038 LBS



PARTIAL PLAN VIEW

SEE SPECIAL NOTE 3 BELOW.

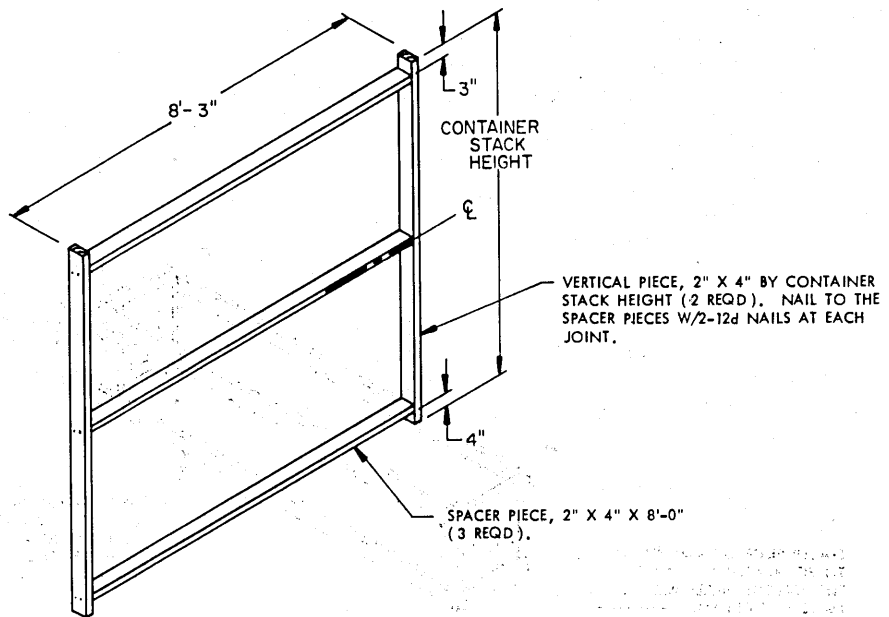
SPECIAL NOTES:

1. A 39-CONTAINER LOAD OF THE 1-UNIT PACK IS SHOWN IN A 50'-6" LONG BY 9'-2" WIDE BOX CAR EQUIPPED WITH 12'-0" WIDE STAGGERED DOORS OF THE CONVENTIONAL SLIDING OR PLUG TYPE. WIDER CARS CAN BE USED. SEE GENERAL NOTES "F" AND "J" ON PAGE 2.
2. THE PROCEDURES DEPICTED ON PAGE 4 AND THE "SPECIAL NOTES" ON PAGE 5 ARE APPLICABLE TO THE SHIPMENT OF THE LOAD SHOWN IN THE "PARTIAL PLAN VIEW" ABOVE.
3. PIECES MARKED ⑦ THRU ⑩ MUST BE USED AT BOTH ENDS OF A 50'-6" LONG CAR.

KEY NUMBERS

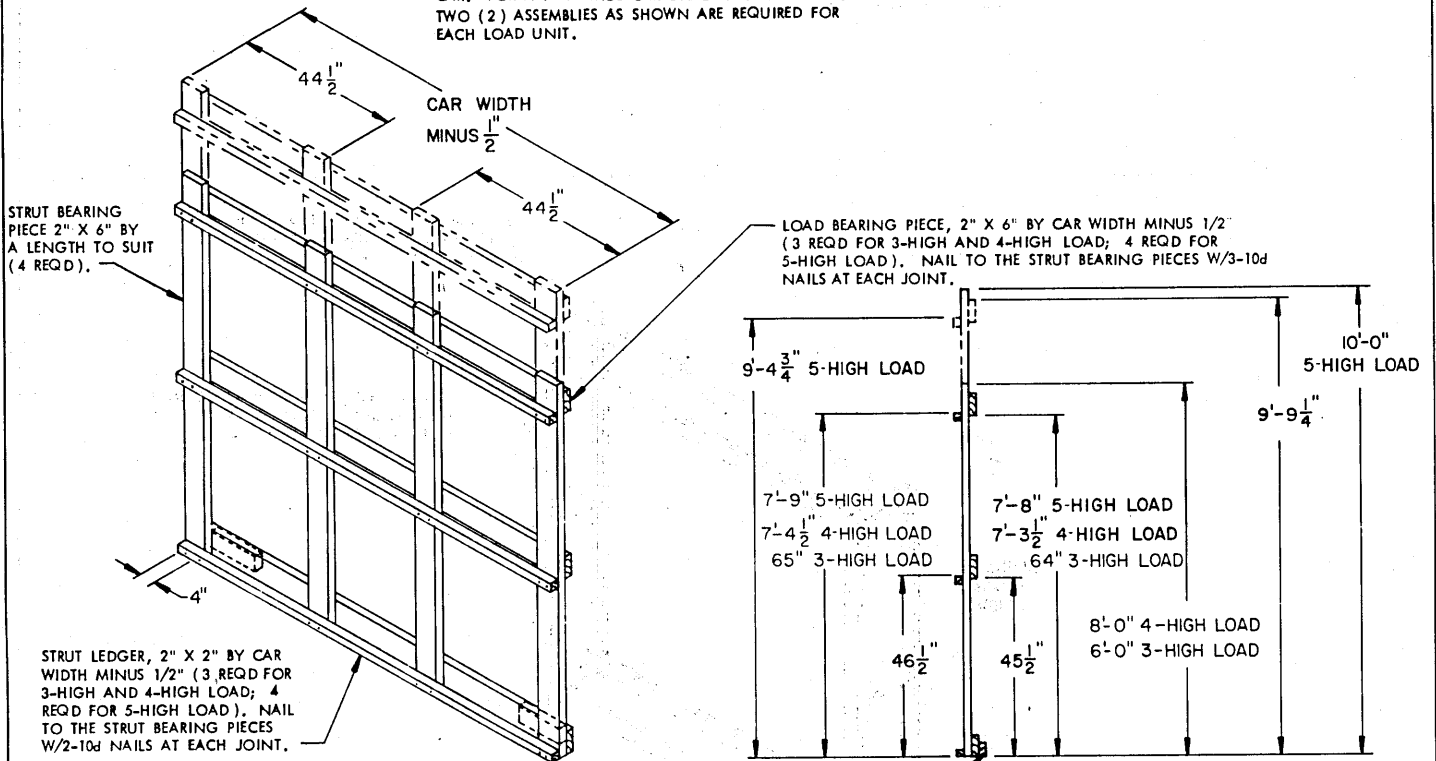
FOR KEY NUMBERS ① THRU ⑥ SEE PAGE 4.

- ⑦ END-OF-CAR GATE (2 REQD). SEE THE "END/CENTER GATE A" DETAIL ON PAGE 7. NOTE: HOLD-DOWN PIECES SHOWN ON GATE DETAIL ARE NOT REQUIRED FOR GATES POSITIONED AGAINST CAR END-WALLS. SEE SPECIAL NOTE 3 AT LEFT.
- ⑧ END-OF-LOAD GATE (2 REQD). SEE THE "END/CENTER GATE A" DETAIL ON PAGE 7.
- ⑨ STRUT, 4" X 4" X 42" (24 REQD, 12 AT EACH END OF THE CAR). TOENAIL TO VERTICALS OF GATES MARKED ⑦ AND ⑧ W/2-16d NAILS AT EACH END.
- ⑩ GATE HOLD-DOWN, 2" X 4" X 46" (DOUBLED) (2 REQD, 1 AT EACH END-WALL). POSITION OVER CENTER VERTICALS OF GATE MARKED ⑦ AND NAIL THE FIRST PIECE TO THE CAR END-WALL W/5-12d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.

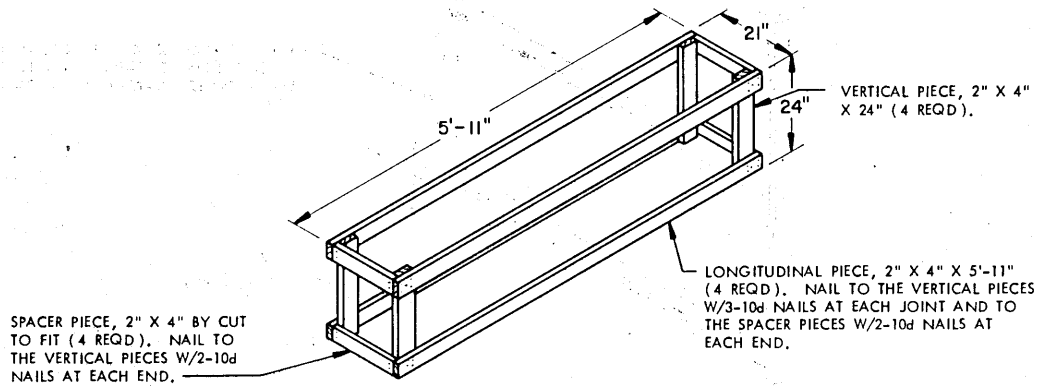


SPACER ASSEMBLY A
(FOR 1-UNIT PACK)

THIS ASSEMBLY AS SHOWN IS FOR USE IN A 9'-2" WIDE CAR. FOR A 9'-4" WIDE CAR USE 2" X 6" MATERIAL. TWO (2) ASSEMBLIES AS SHOWN ARE REQUIRED FOR EACH LOAD UNIT.



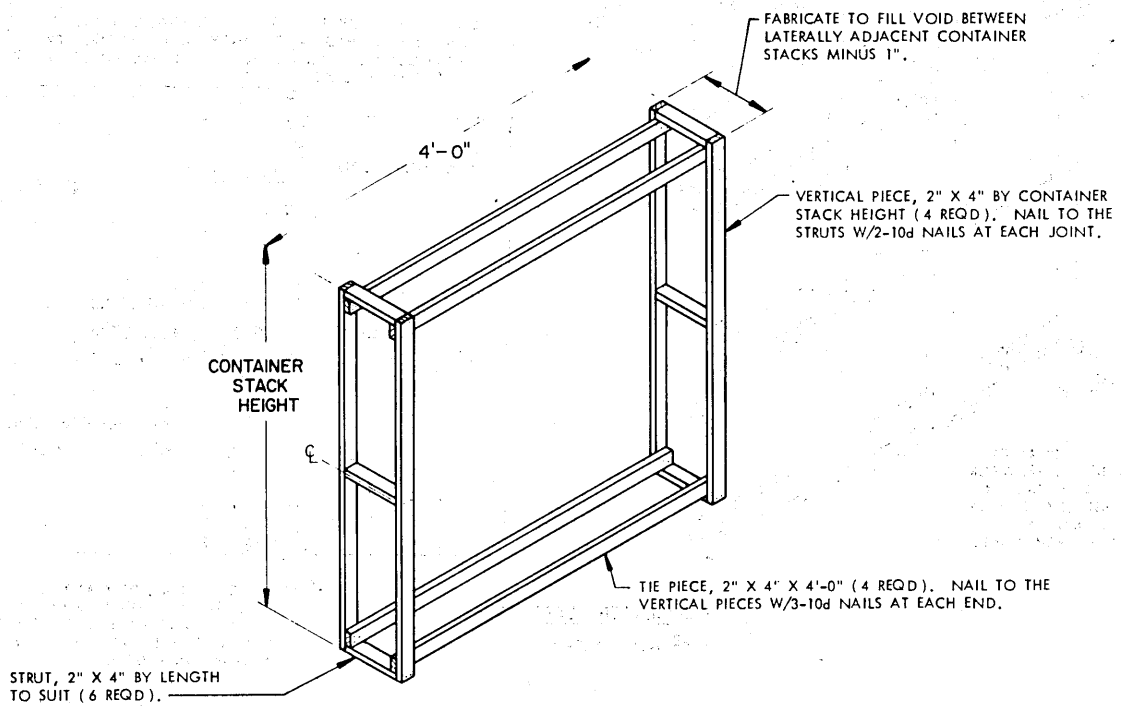
END/CENTER GATE A
(FOR 1-UNIT PACK)



FILLER ASSEMBLY A

(FOR 1-UNIT PACK)

THREE (3) ASSEMBLIES AS SHOWN ARE REQUIRED TO BE USED IN THE PLACE OF EACH OMITTED CONTAINER IN THE TOP LAYER OF A LOAD.



SPACER ASSEMBLY B

(FOR 1-UNIT PACK)

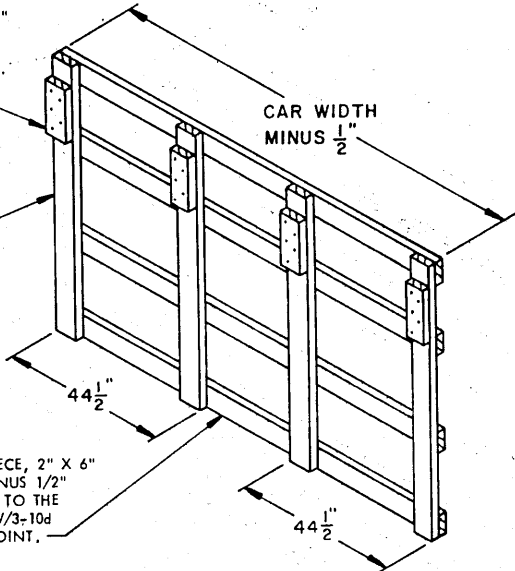
FOUR (4) ASSEMBLIES AS SHOWN ARE REQUIRED FOR EACH LOAD UNIT.

DETAILS

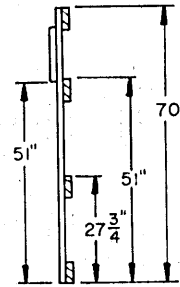
HOLD-DOWN CLEAT, 2" X 6" X 14" (4 REQD). NAIL TO THE VERTICAL PIECE W/5-10d NAILS.

VERTICAL PIECE 2" X 6" X 70" (4 REQD).

LOAD BEARING PIECE, 2" X 6" BY CAR WIDTH MINUS 1/2" (4 REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.



LCL GATE A
(FOR 1-UNIT PACK)

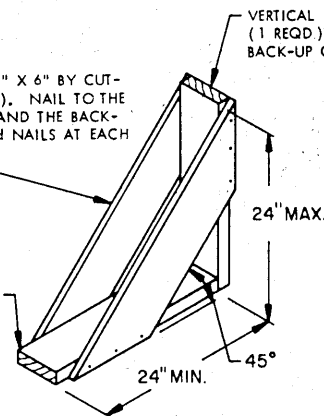


END VIEW

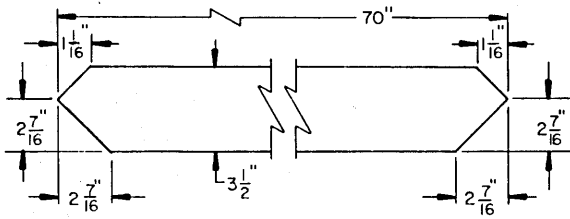
ANGLE BRACE, 1" X 6" BY CUT-TO-FIT (2 REQD). NAIL TO THE VERTICAL PIECE AND THE BACK-UP CLEAT W/3-8d NAILS AT EACH END.

VERTICAL PIECE, 2" X 6" X 24" (1 REQD). NAIL TO THE BACK-UP CLEAT W/2-16d NAILS.

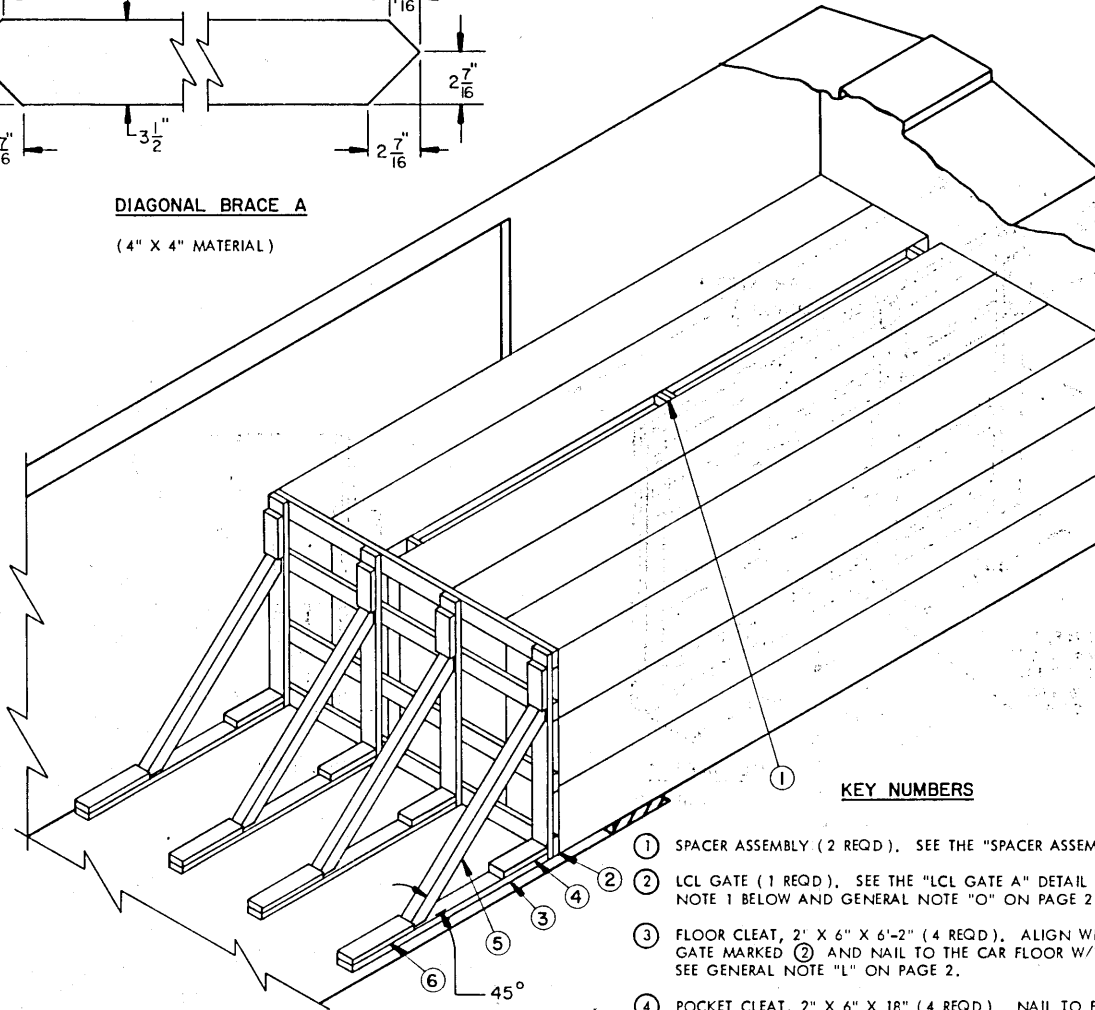
BACK-UP CLEAT, 2" X 6" X 24" (1 REQD).



LCL BRACE
(FOR 1-UNIT AND/OR 4-UNIT PACK)



DIAGONAL BRACE A
(4" X 4" MATERIAL)



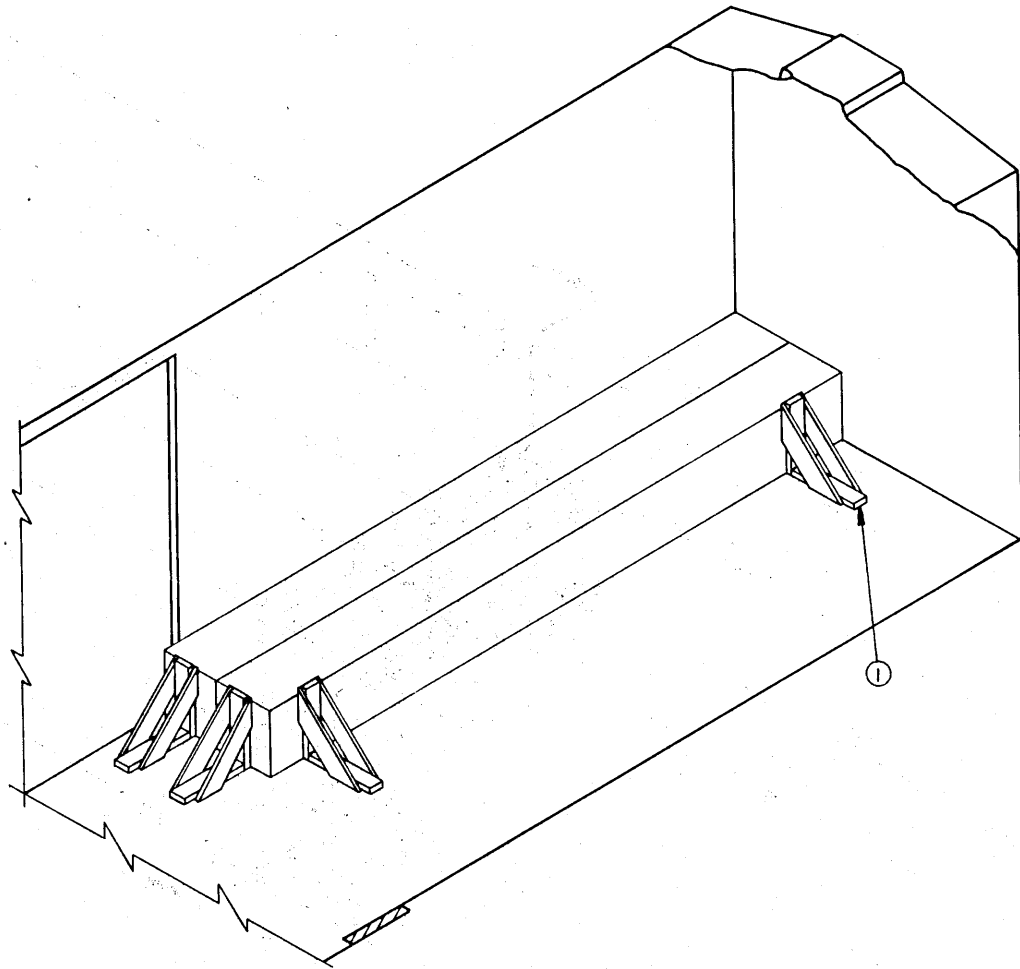
ISOMETRIC VIEW

KEY NUMBERS

- ① SPACER ASSEMBLY (2 REQD). SEE THE "SPACER ASSEMBLY A" DETAIL ON PAGE 7.
- ② LCL GATE (1 REQD). SEE THE "LCL GATE A" DETAIL ON PAGE 9. SEE SPECIAL NOTE 1 BELOW AND GENERAL NOTE "O" ON PAGE 2.
- ③ FLOOR CLEAT, 2" X 6" X 6'-2" (4 REQD). ALIGN WITH VERTICALS OF LCL GATE MARKED ② AND NAIL TO THE CAR FLOOR W/1-16d NAIL EVERY 6". SEE GENERAL NOTE "L" ON PAGE 2.
- ④ POCKET CLEAT, 2" X 6" X 18" (4 REQD). NAIL TO FLOOR CLEAT MARKED ③ W/3-40d NAILS. TOENAIL TO VERTICALS OF LCL GATE W/2-12d NAILS.
- ⑤ DIAGONAL BRACE, 4" X 4" X 70" (4 REQD). SEE THE "DIAGONAL BRACE A" DETAIL ABOVE. TOENAIL TO THE LCL GATE AND TO FLOOR CLEAT MARKED ③ W/2-16d NAILS AT EACH END.
- ⑥ BACK-UP CLEAT, 2" X 6" X 24" (4 REQD). POSITION AGAINST DIAGONAL BRACE MARKED ⑤ AND NAIL TO FLOOR CLEAT MARKED ③ W/5-40d NAILS.

SPECIAL NOTES:

- 1. A 15-CONTAINER LOAD OF THE 1-UNIT PACK IS SHOWN IN A 9'-2" WIDE CAR AND DEPICTS THE USE OF KNEE-BRACES. THESE PROCEDURES ARE LIMITED TO A 3-LAYER LOAD BUT CAN BE APPLIED AT ONE OR BOTH ENDS OF A 50'-6" LONG CAR.
- 2. TO ADJUST THE QUANTITY OF CONTAINERS TO BE SHIPPED, ONE OR MORE CONTAINERS MAY BE OMITTED FROM THE TOP LAYER AND THREE (3) "FILLER ASSEMBLIES", AS DETAILED ON PAGE 8, USED IN THE PLACE OF EACH OMITTED CONTAINER. ALSO ONE OR MORE CENTER STACKS CAN BE OMITTED FROM THE DEPICTED LOAD BY USING FOUR (4) SPACER ASSEMBLIES AS SHOWN IN THE "SPACER ASSEMBLY B" DETAIL ON PAGE 8 IN LIEU OF "SPACER ASSEMBLIES A" SPECIFIED AS PIECES MARKED ①.



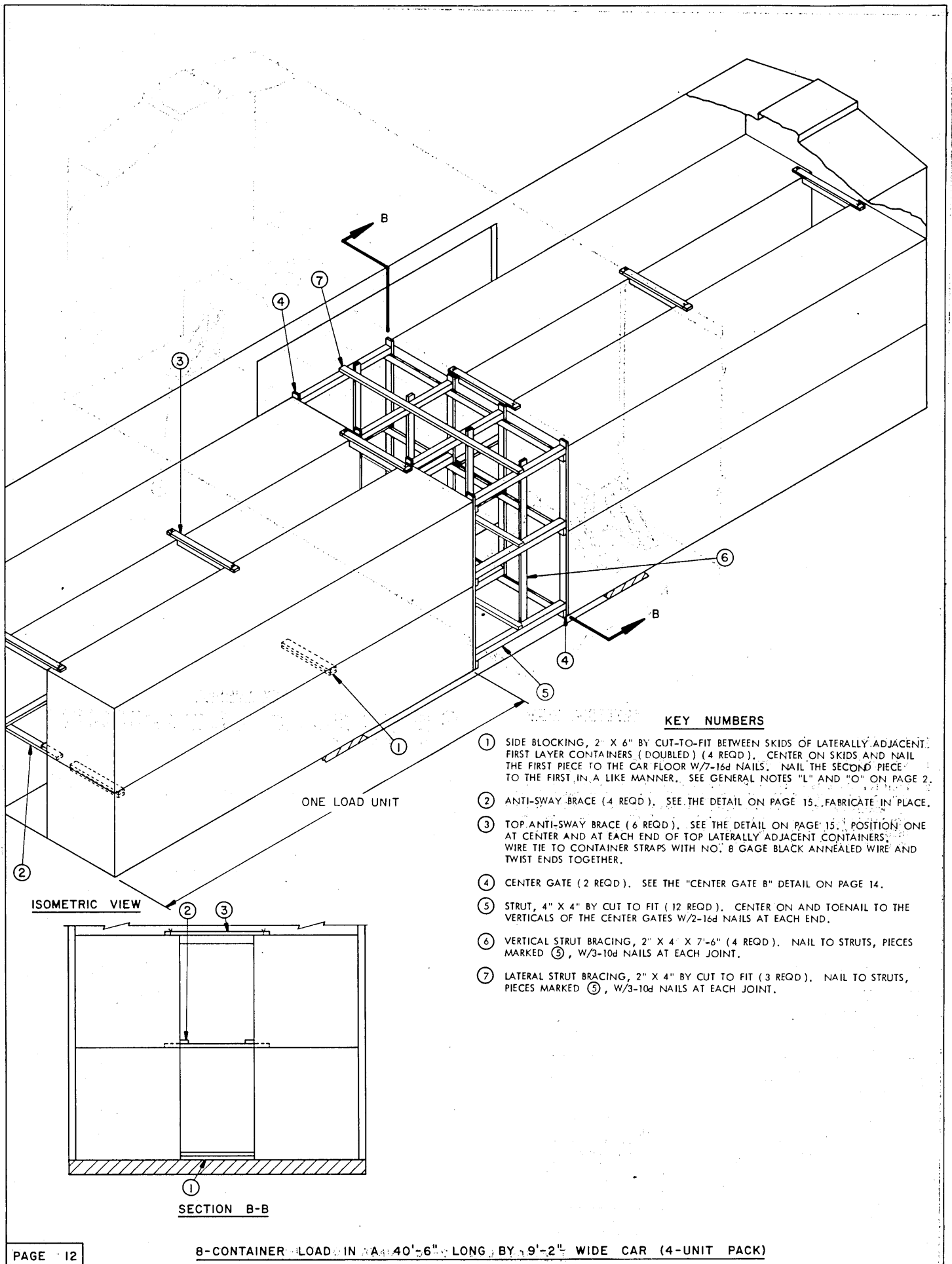
ISOMETRIC VIEW

SPECIAL NOTES:

1. A 2-CONTAINER LOAD OF THE 1-UNIT PACK IS SHOWN.
2. EACH LCL BRACE AS APPLIED FOR LONGITUDINAL OR LATERAL BRACING WILL SUPPORT 2,000 POUNDS OR 8,000 POUNDS RESPECTIVELY. A MINIMUM OF TWO (2) BRACES ARE REQUIRED FOR LATERAL BRACING AND ONE (1) LCL BRACE PER CONTAINER FOR LONGITUDINAL BRACING. IF DESIRED, LCL BRACES MAY BE USED AT BOTH ENDS AND ON BOTH SIDES OF THE CONTAINERS. USE OF LCL BRACES IS LIMITED TO A 1-LAYER LOAD.

KEY NUMBER

- ① LCL BRACE (4 REQD). SEE THE DETAIL ON PAGE 9. POSITION AS SHOWN AND NAIL TO THE CAR FLOOR W/7-16d NAILS. SEE GENERAL NOTES "L" AND "O" ON PAGE 2.



KEY NUMBERS

- ① SIDE BLOCKING, 2" X 6" BY CUT-TO-FIT BETWEEN SKIDS OF LATERALLY ADJACENT FIRST LAYER CONTAINERS (DOUBLED) (4 REQD). CENTER ON SKIDS AND NAIL THE FIRST PIECE TO THE CAR FLOOR W/7-16d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER. SEE GENERAL NOTES "L" AND "O" ON PAGE 2.
- ② ANTI-SWAY BRACE (4 REQD). SEE THE DETAIL ON PAGE 15. FABRICATE IN PLACE.
- ③ TOP ANTI-SWAY BRACE (6 REQD). SEE THE DETAIL ON PAGE 15. POSITION ONE AT CENTER AND AT EACH END OF TOP LATERALLY ADJACENT CONTAINERS. WIRE TIE TO CONTAINER STRAPS WITH NO. 8 GAGE BLACK ANNEALED WIRE AND TWIST ENDS TOGETHER.
- ④ CENTER GATE (2 REQD). SEE THE "CENTER GATE B" DETAIL ON PAGE 14.
- ⑤ STRUT, 4" X 4" BY CUT TO FIT (12 REQD). CENTER ON AND TOENAIL TO THE VERTICALS OF THE CENTER GATES W/2-16d NAILS AT EACH END.
- ⑥ VERTICAL STRUT BRACING, 2" X 4" X 7'-6" (4 REQD). NAIL TO STRUTS, PIECES MARKED ⑤, W/3-10d NAILS AT EACH JOINT.
- ⑦ LATERAL STRUT BRACING, 2" X 4" BY CUT TO FIT (3 REQD). NAIL TO STRUTS, PIECES MARKED ⑤, W/3-10d NAILS AT EACH JOINT.

ISOMETRIC VIEW

SECTION B-B

SPECIAL NOTES:

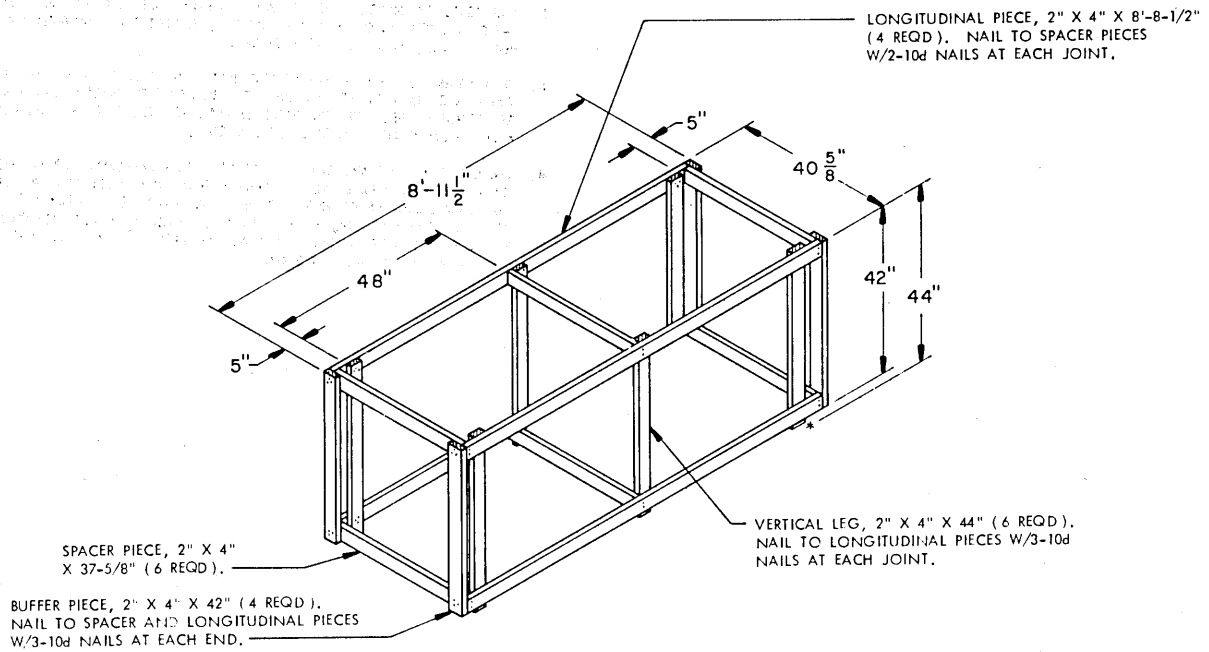
1. AN 8-CONTAINER LOAD OF 4-UNIT PACKS IS SHOWN IN A 40'-6" LONG BY 9'-2" WIDE (INSIDE DIMENSION) BOX CAR EQUIPPED WITH 12'-0" WIDE STAGGERED DOOR OPENINGS OF THE CONVENTIONAL SLIDING OR PLUG TYPE. SEE GENERAL NOTES "F" AND "J" ON PAGE 2. SEE NOTE 3 BELOW FOR USE OF LONGER CARS.
2. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR THE SHIPMENT OF A 4-CONTAINER LOAD OF 8-UNIT PACKS, EXCEPT THAT ANTI-SWAY BRACES, PIECES MARKED ②, WILL NOT BE REQUIRED.
3. IF A 50'-6" LONG CAR IS OFFERED FOR SHIPMENT OF A LOAD OF 4-UNIT PACKS AND/OR 8-UNIT PACKS, IN LIEU OF PROCEDURES SHOWN ON PAGE 12, THE PROCEDURES SPECIFIED ON PAGE 16 WILL BE USED FOR BRACING AND BLOCKING A LOAD UNIT AT EACH END OF THE CAR.
4. THE LOAD AS SHOWN CAN BE ADJUSTED FOR SHIPMENT OF A 7-CONTAINER OR A 6-CONTAINER LOAD BY OMITTING A TOP-LAYER CONTAINER FROM EITHER OR BOTH LOAD UNITS AND SUBSTITUTING TWO (2) "FILLER ASSEMBLIES B" AS DETAILED ON PAGE 14, IN THE PLACE OF EACH OMITTED CONTAINER. ONE END OF EACH TOP ANTI-SWAY BRACE MARKED ③ WILL BE WIRE TIED TO A "FILLER ASSEMBLY" AS APPLICABLE.

BILL OF MATERIAL

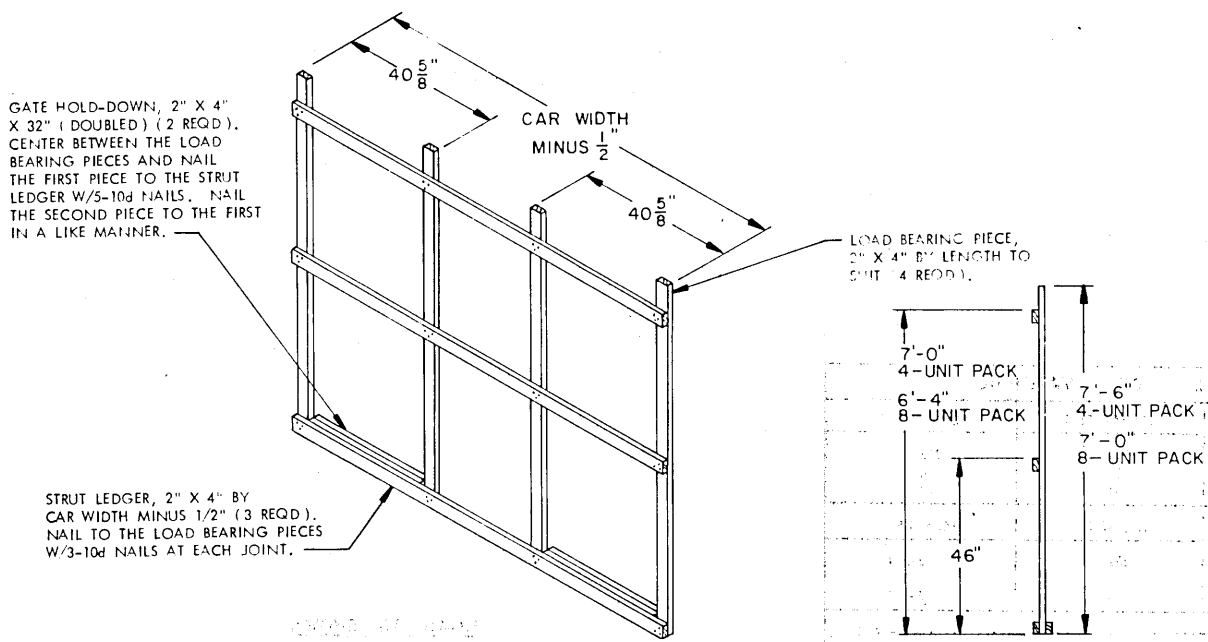
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	319	213
2" X 6"	20	20
4" X 4"	54	72
NAILS	NO. REQD	POUNDS
10d (3")	232	3-3/4
12d (3-1/4")	24	1/2
16d (3-1/2")	104	2-1/2
WIRE, NO. 8 GAGE ----- AS REQD ----- NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
4-UNIT PACK -----	8 -----	13,000 LBS
DUNNAGE -----		769 LBS
TOTAL WEIGHT -----		13,769 LBS

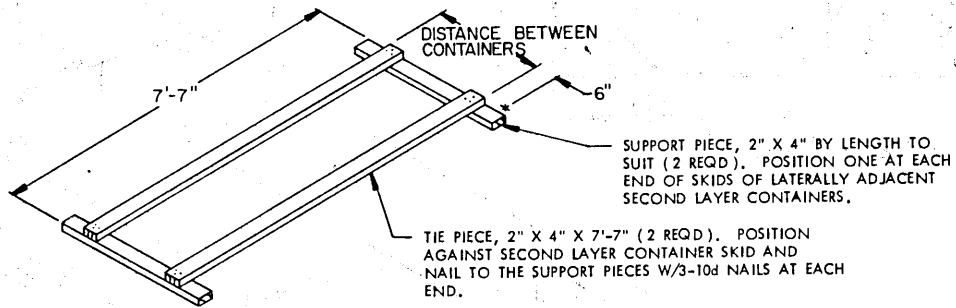


FILLER ASSEMBLY B
(FOR 4-UNIT PACK)



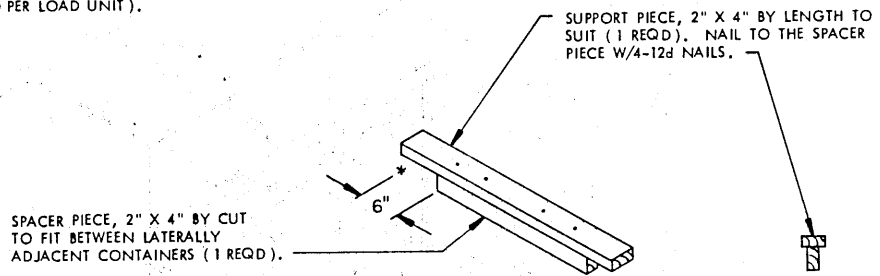
CENTER GATE B
(FOR 4-UNIT AND/OR 8-UNIT PACK)

END VIEW



ANTI-SWAY BRACE

(FOR 4-UNIT PACK)
THIS ASSEMBLY MUST BE FABRICATED IN PLACE (2 REQD PER LOAD UNIT).



TOP ANTI-SWAY BRACE

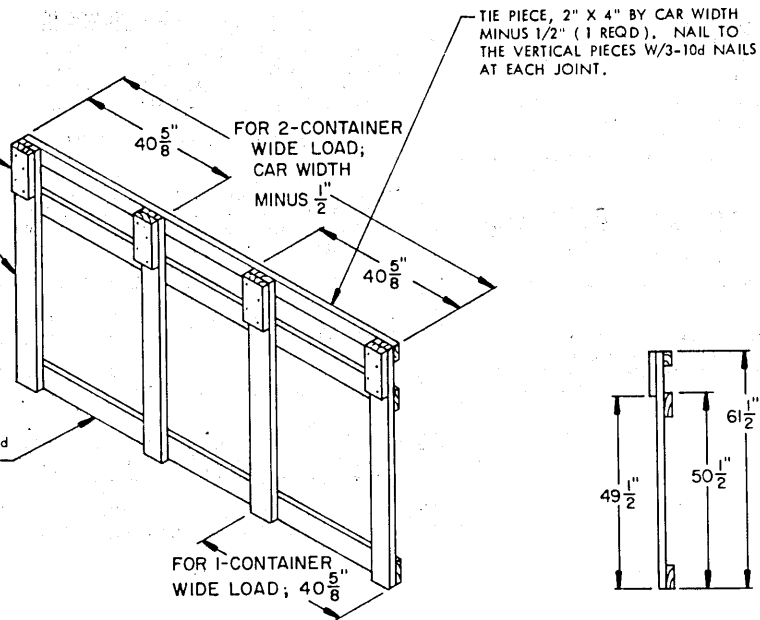
(FOR 4-UNIT AND/OR 8-UNIT PACK)

END VIEW

HOLD-DOWN CLEAT, 2" X 6" X 12" (4 REQD). NAIL TO THE VERTICAL PIECE W/4-10d NAILS.

VERTICAL PIECE, 2" X 6" X 61-1/2" (4 REQD).

LOAD BEARING PIECE, 2" X 6" BY CAR WIDTH MINUS 1/2" (2 REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

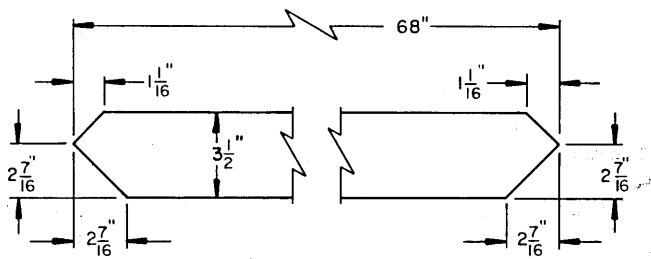


LCL GATE B

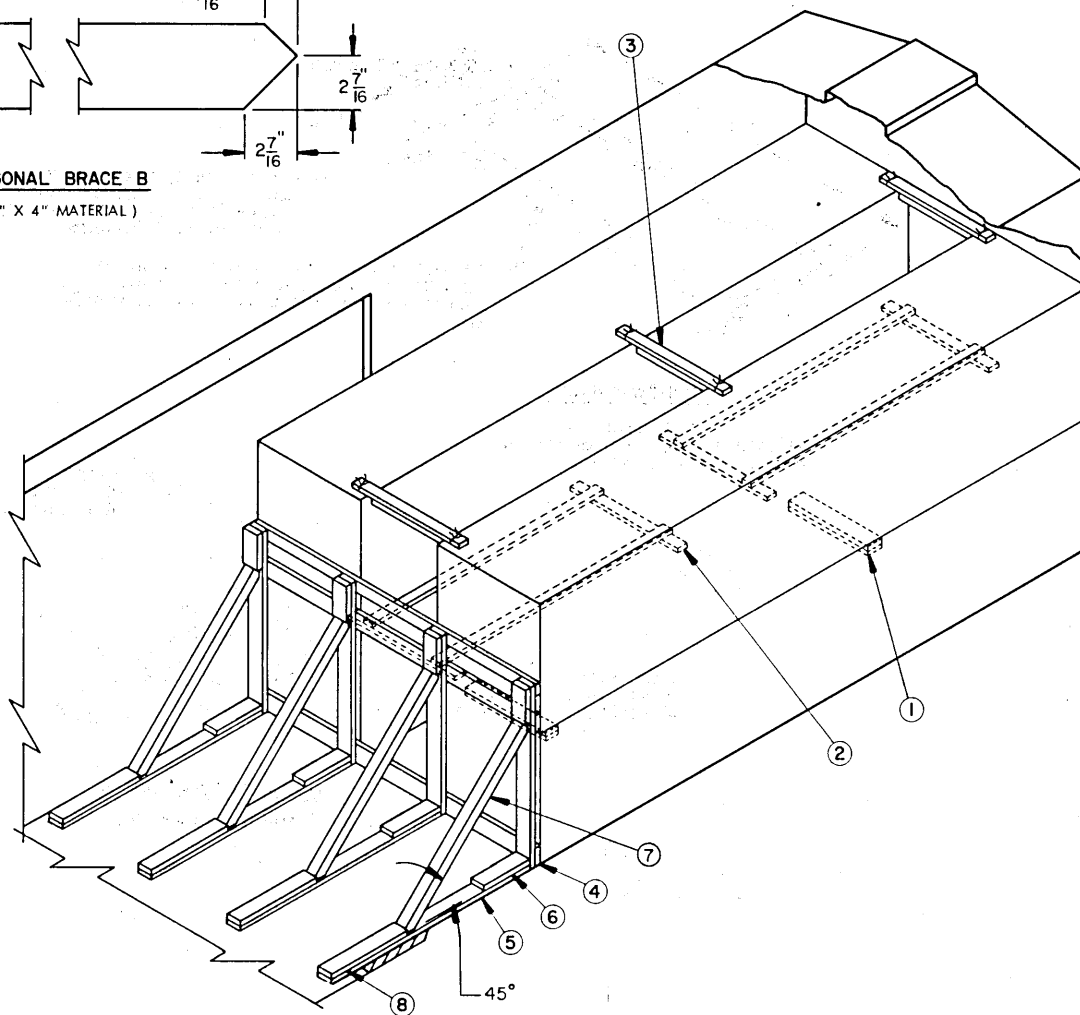
(FOR 4-UNIT AND/OR 8-UNIT PACK)

END VIEW

DETAILS



DIAGONAL BRACE B
(4" X 4" MATERIAL)



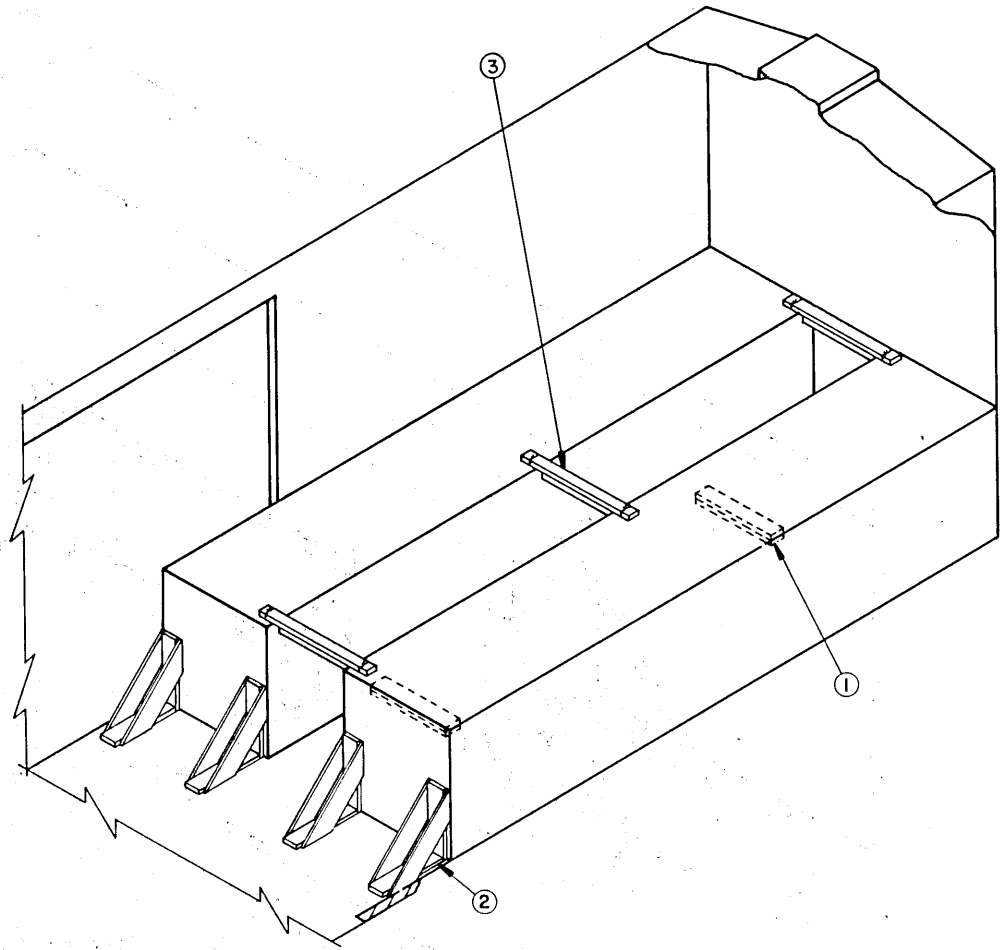
ISOMETRIC VIEW

SPECIAL NOTES:

1. A 4-CONTAINER LOAD OF 4-UNIT PACKS IS SHOWN IN A 9'-2" WIDE (INSIDE DIMENSION) BOX CAR. WIDER OR NARROWER CARS CAN BE USED.
2. FOUR KNEE BRACE ASSEMBLIES AS SHOWN ABOVE ARE ADEQUATE FOR RETAINING A MAXIMUM SIZE LCL LOAD.
3. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR THE SHIPMENT OF A 2-CONTAINER LOAD OF 8-UNIT PACKS, EXCEPT THAT ANTI-SWAY BRACES MARKED ② WILL NOT BE REQUIRED.
4. KNEE BRACE ASSEMBLIES MAY BE USED FOR BLOCKING AND BRACING A LOAD UNIT IN EACH END OF A 50'-6" LONG CAR.
5. FOR SHIPMENT OF A 3-CONTAINER LOAD OF 4-UNIT PACKS, A TOP-LAYER CONTAINER WILL BE OMITTED AND TWO (2) "FILLER ASSEMBLIES B", AS DETAILED ON PAGE 14, WILL BE USED IN THE PLACE OF THE OMITTED CONTAINER. ONE END OF EACH TOP ANTI-SWAY BRACE MARKED ③ WILL BE WIRE TIED TO A "FILLER ASSEMBLY".

KEY NUMBERS

- ① SIDE BLOCKING, 2" X 6" BY CUT-TO-FIT BETWEEN SKIDS OF LATERALLY ADJACENT FIRST LAYER CONTAINERS (DOUBLED) (2 REQD). CENTER ON SKIDS AND NAIL THE FIRST PIECE TO THE CAR FLOOR W/7-16d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER. SEE GENERAL NOTES "L" AND "O" ON PAGE 2.
- ② ANTI-SWAY BRACE (2 REQD). SEE THE DETAIL ON PAGE 15. SEE SPECIAL NOTE 3 AT THE LEFT.
- ③ TOP ANTI-SWAY BRACE (3 REQD). SEE THE DETAIL ON PAGE 15. POSITION ONE AT CENTER AND AT EACH END OF TOP LATERALLY ADJACENT CONTAINERS. WIRE TIE TO CONTAINER STRAPS WITH NO. 8 GAGE BLACK ANNEALED WIRE AND TWIST ENDS TOGETHER.
- ④ LCL GATE (1 REQD). SEE THE "LCL GATE B" DETAIL ON PAGE 15.
- ⑤ FLOOR CLEAT, 2" X 6" X 6'-6" (4 REQD). ALIGN WITH VERTICAL OF LCL GATE MARKED ④ AND NAIL TO THE CAR FLOOR W/1-16d NAIL EVERY 8".
- ⑥ POCKET CLEAT, 2" X 6" X 18" (4 REQD). NAIL TO THE FLOOR CLEAT MARKED ⑤ W/3-40d NAILS AND TOENAIL TO VERTICAL OF THE LCL GATE MARKED ④ W/2-12d NAILS.
- ⑦ DIAGONAL BRACE, 4" X 4" X 68" (4 REQD). SEE THE "DIAGONAL BRACE B" DETAIL ABOVE. TOENAIL TO VERTICAL OF LCL GATE MARKED ④ AND TO FLOOR CLEAT MARKED ⑤ W/2-16d NAILS AT EACH END.
- ⑧ BACK-UP CLEAT, 2" X 6" X 30" (4 REQD). POSITION AGAINST DIAGONAL BRACE MARKED ⑦ AND NAIL TO FLOOR CLEAT MARKED ⑤ W/6-40d NAILS.



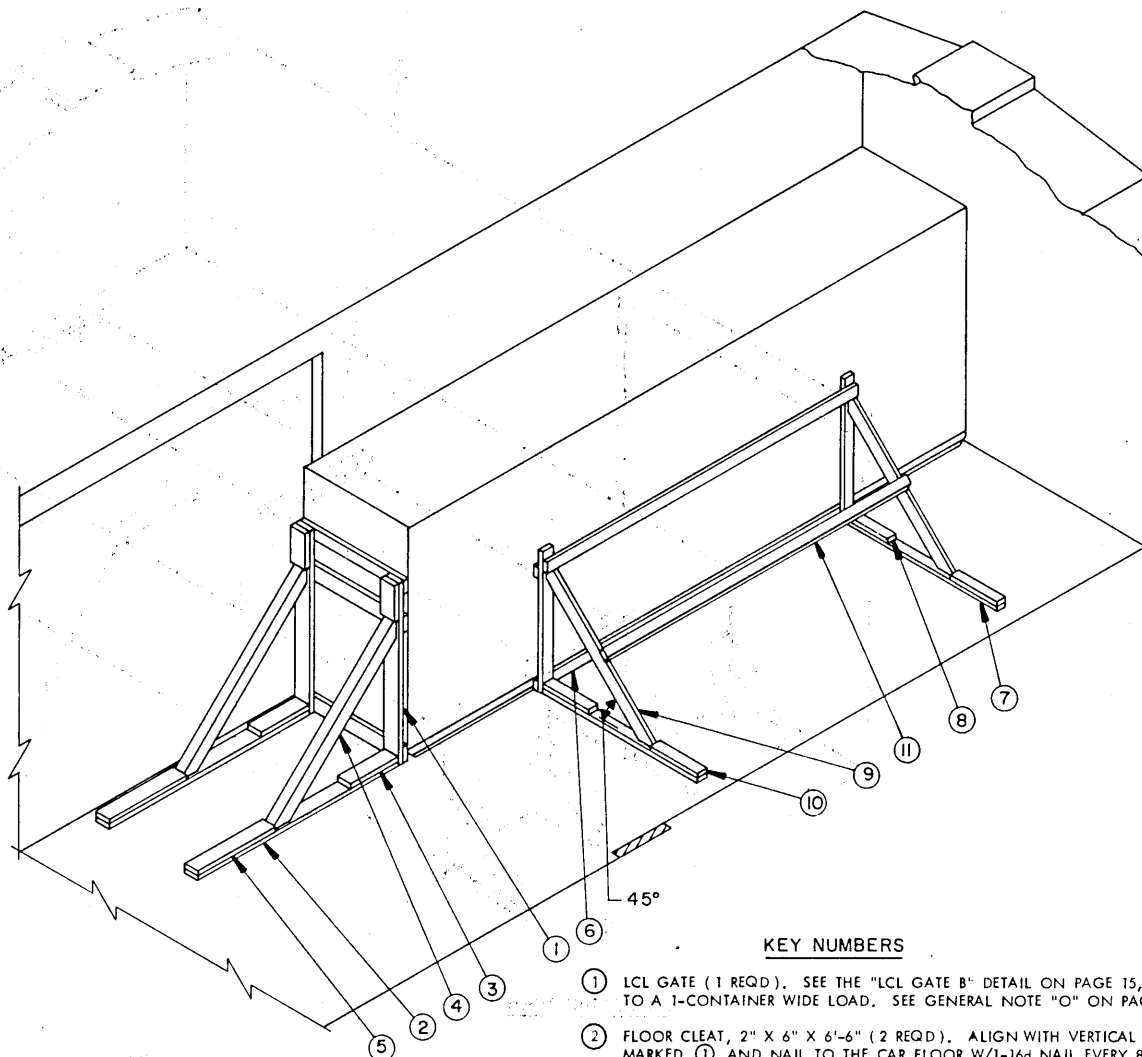
ISOMETRIC VIEW

SPECIAL NOTES:

1. A 2-CONTAINER LOAD OF 4-UNIT PACKS IS SHOWN IN A 9'-2" WIDE (INSIDE DIMENSION) BOX CAR. SEE THE SPECIAL NOTES AND PROCEDURES ON PAGE 16 WHICH APPLY TO THE SHIPMENT OF A 2-CONTAINER LOAD OF 8-UNIT PACKS.
2. FOR SHIPMENT OF A 1-CONTAINER LOAD OF THE 4-UNIT PACK, OMIT PIECES MARKED ① AND ③; AND IN LIEU THEREOF, INSTALL TWO (2) LCL BRACES MARKED ② AT THE SIDE OF THE CONTAINER, ONE CENTERED ON EACH SKID, AND NAIL AS SPECIFIED. SEE PAGE 18 FOR PROCEDURES REQUIRED FOR A 1-CONTAINER LOAD OF THE 8-UNIT PACK.

KEY NUMBERS

- ① SIDE BLOCKING, 2" X 6" BY CUT TO FIT BETWEEN SKIDS OF LATERALLY ADJACENT CONTAINERS (DOUBLED) (2 REQD). CENTER ON SKIDS AND NAIL THE FIRST PIECE TO THE CAR FLOOR W/7-16d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER. SEE GENERAL NOTES "L" AND "O" ON PAGE 2.
- ② LCL BRACE (4 REQD). SEE THE DETAIL ON PAGE 9. POSITION AS SHOWN AND NAIL TO THE CAR FLOOR W/7-16d NAILS.
- ③ TOP ANTI-SWAY BRACE (3 REQD). SEE THE DETAIL ON PAGE 15. POSITION ONE AT CENTER AND AT EACH END OF CONTAINERS. WIRE TIE TO CONTAINER STRAPS WITH NO. 8 GAGE BLACK ANNEALED WIRE AND TWIST ENDS TOGETHER.



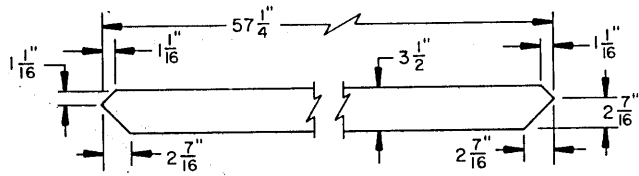
ISOMETRIC VIEW

SPECIAL NOTES:

1. A 1-CONTAINER LOAD OF THE 8-UNIT PACK IS SHOWN IN A 9'-2" WIDE (INSIDE DIMENSION) BOX CAR. WIDER OR NARROWER CARS CAN BE USED.
2. FOR SHIPMENT OF A 2-CONTAINER LOAD OF 8-UNIT PACKS, SEE THE PROCEDURES AND SPECIAL NOTE 3 ON PAGE 16.
3. PROCEDURES FOR SHIPMENT OF A 1-CONTAINER LOAD OF THE 4-UNIT PACK IS SPECIFIED IN SPECIAL NOTE 2 ON PAGE 17.

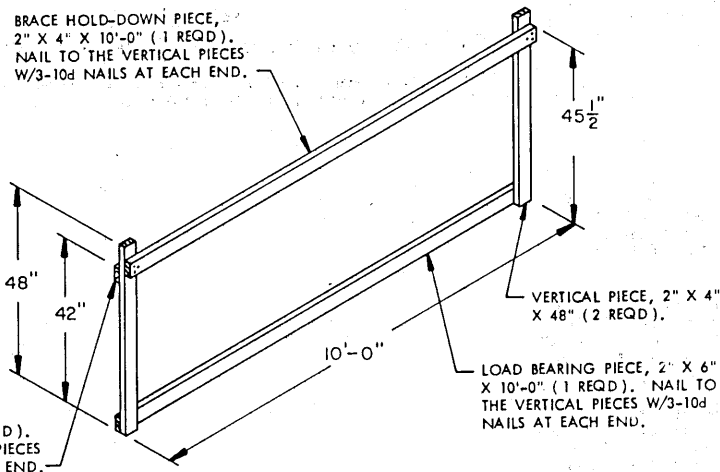
KEY NUMBERS

- ① LCL GATE (1 REQD). SEE THE "LCL GATE B" DETAIL ON PAGE 15, AS APPLICABLE TO A 1-CONTAINER WIDE LOAD. SEE GENERAL NOTE "O" ON PAGE 2.
- ② FLOOR CLEAT, 2" X 6" X 6'-6" (2 REQD). ALIGN WITH VERTICAL OF LCL GATE MARKED ① AND NAIL TO THE CAR FLOOR W/1-16d NAIL EVERY 8". SEE GENERAL NOTE "L" ON PAGE 2.
- ③ POCKET CLEAT, 2" X 6" X 18" (2 REQD). NAIL TO THE FLOOR CLEAT MARKED ② W/3-40d NAILS AND TOENAIL TO THE VERTICAL OF LCL GATE MARKED ① W/2-12d NAILS.
- ④ DIAGONAL BRACE, 4" X 4" X 68" (2 REQD). SEE THE "DIAGONAL BRACE B" DETAIL ON PAGE 16. TOENAIL TO THE VERTICAL OF LCL GATE MARKED ① AND TO FLOOR CLEAT MARKED ② W/2-16d NAILS AT EACH END.
- ⑤ BACK-UP CLEAT, 2" X 6" X 30" (2 REQD). POSITION AGAINST DIAGONAL BRACE MARKED ④ AND NAIL TO FLOOR CLEAT MARKED ② W/6-40d NAILS.
- ⑥ LCL GATE (1 REQD). SEE THE "LCL SIDE GATE C" DETAIL ON PAGE 19. POSITION TO CENTER LONGITUDINALLY AGAINST SIDE OF CONTAINER.
- ⑦ FLOOR CLEAT, 2" X 4" X 60" (2 REQD). ALIGN WITH VERTICAL OF SIDE GATE MARKED ⑥ AND NAIL TO THE CAR FLOOR W/1-16d NAIL EVERY 6".
- ⑧ POCKET CLEAT, 2" X 4" X 18" (2 REQD). NAIL TO THE FLOOR CLEAT MARKED ⑦ W/3-16d NAILS AND TOENAIL TO THE VERTICAL OF THE SIDE GATE MARKED ⑥ W/2-12d NAILS.
- ⑨ DIAGONAL BRACE, 2" X 4" X 57-1/4" (2 REQD). SEE THE "DIAGONAL BRACE C" DETAIL ON PAGE 19. TOENAIL TO THE VERTICAL OF SIDE GATE MARKED ⑥ AND TO FLOOR CLEAT MARKED ⑦ W/2-12d NAILS AT EACH END.
- ⑩ BRACE CLEAT, 2" X 4" X 18" (2 REQD). POSITION AGAINST DIAGONAL BRACE MARKED ⑨ AND NAIL TO FLOOR CLEAT MARKED ⑦ W/4-16d NAILS.
- ⑪ TIE PIECE, 2" X 4" X 10'-0" (1 REQD). NAIL TO DIAGONAL BRACES MARKED ⑨ W/2-10d NAILS AT EACH END.



DIAGONAL BRACE C
(2" X 4" MATERIAL)

BRACE HOLD-DOWN PIECE, 2" X 4" X 10'-0" (1 REQD).
NAIL TO THE VERTICAL PIECES
W/3-10d NAILS AT EACH END.

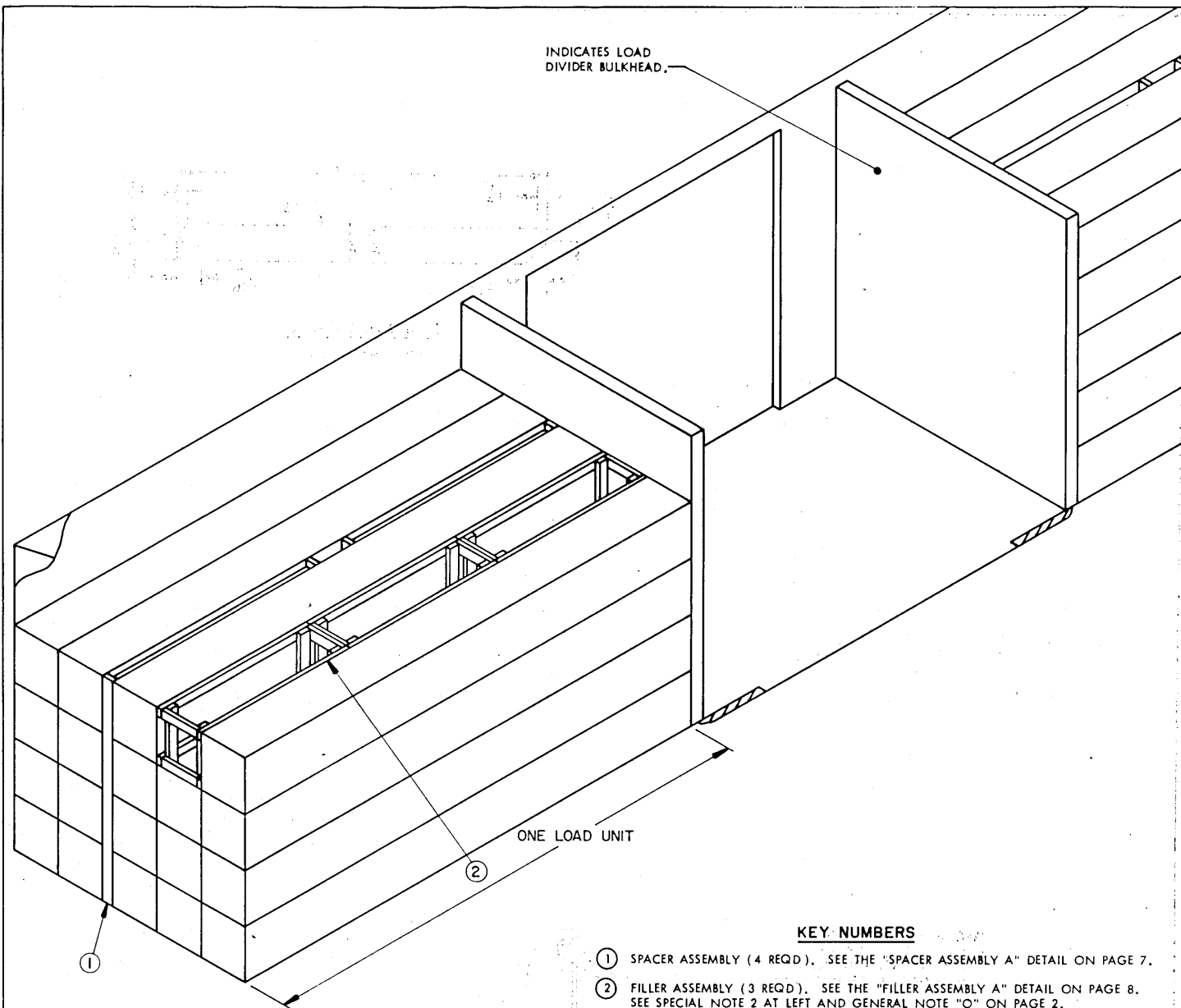


LOAD BEARING PIECE, 2" X 4" X 10'-0" (1 REQD).
NAIL TO THE VERTICAL PIECES
W/3-10d NAILS AT EACH END.

LOAD BEARING PIECE, 2" X 6" X 10'-0" (1 REQD).
NAIL TO THE VERTICAL PIECES
W/3-10d NAILS AT EACH END.

VERTICAL PIECE, 2" X 4" X 48" (2 REQD).

LCL SIDE GATE C
(FOR 8-UNIT PACK)



INDICATES LOAD DIVIDER BULKHEAD.

ONE LOAD UNIT

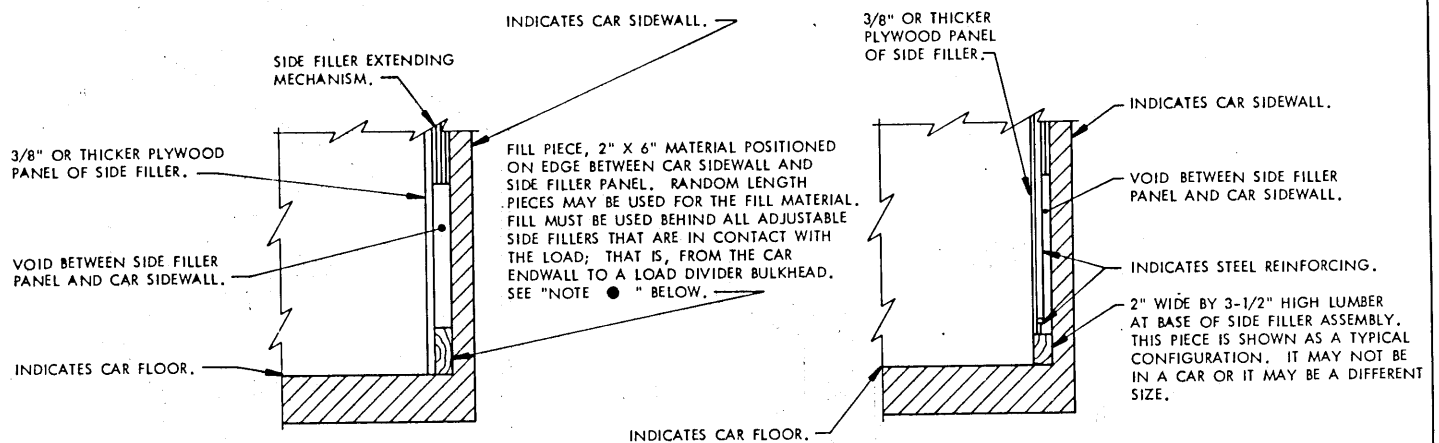
ISOMETRIC VIEW

KEY NUMBERS

- ① SPACER ASSEMBLY (4 REQD). SEE THE "SPACER ASSEMBLY A" DETAIL ON PAGE 7.
- ② FILLER ASSEMBLY (3 REQD). SEE THE "FILLER ASSEMBLY A" DETAIL ON PAGE 8. SEE SPECIAL NOTE 2 AT LEFT AND GENERAL NOTE "O" ON PAGE 2.

SPECIAL NOTES:

1. A 39-CONTAINER LOAD OF THE 1-UNIT PACK IS SHOWN IN A 50'-6" LONG BY 9'-2" WIDE BOX CAR HAVING 10'-6" WIDE THROUGH DOORS OF THE CONVENTIONAL SLIDING OR PLUG TYPE. WIDER CARS MAY BE USED. SEE GENERAL NOTES "F" AND "J" ON PAGE 2 AND THE SPECIAL NOTES ON PAGE 21.
2. IF A BOX CAR OF THE SIZE SHOWN FOR THE LOAD DEPICTED ABOVE IS TO BE LOADED, IT WILL BE NECESSARY TO OMIT ONE CONTAINER FROM THE TOP LAYER OF THE LOAD, AS SHOWN, BECAUSE AVAILABLE SPACE WILL NOT ALLOW FOR ITS PLACEMENT INTO THE LOAD. FILLER ASSEMBLIES, AS SPECIFIED, MUST BE USED IN THE PLACE OF THE OMITTED CONTAINER. HOWEVER, IF THE INSIDE HEIGHT OF THE CAR, THE DOOR OPENING HEIGHT AND THE AVAILABLE MATERIALS HANDLING EQUIPMENT PERMITS, AN ADDITIONAL CONTAINER MAY BE SHIPPED IN LIEU OF USING "FILLER ASSEMBLIES". ALSO, IF THE DOOR OPENING HEIGHT IS AT LEAST 10'-0" AND THE MATERIALS HANDLING EQUIPMENT PERMITS, IT IS POSSIBLE TO SHIP A 5-LAYER LOAD OF 49 CONTAINERS. FOR SHIPMENT OF A 5-LAYER LOAD, THE HEIGHT OF PIECES MARKED ① MUST BE INCREASED ACCORDINGLY.
3. FOR SHIPMENT OF A LESS-THAN-FULL-LOAD QUANTITY, ONE OR MORE CONTAINERS MAY BE OMITTED FROM THE TOP LAYER OF ONE OR BOTH LOAD UNITS, AND "FILLER ASSEMBLIES" USED IN THE PLACE OF EACH OMITTED CONTAINER. ALSO AN ENTIRE LAYER MAY BE OMITTED FROM ONE OR BOTH LOAD UNITS.



TYPICAL TYPE A

THIS VIEW SHOWS THE INSTALLATION OF A "FILL PIECE" IN A CAR EQUIPPED WITH A STANDARD ADJUSTABLE SIDE FILLER.

TYPICAL TYPE B

THIS VIEW SHOWS A TYPICAL SECTION OF A CAR EQUIPPED WITH HEAVY DUTY, STEEL REINFORCED, ADJUSTABLE SIDE FILLERS. A "FILL PIECE", AS SHOWN IN THE "TYPICAL TYPE A" DETAIL AT THE LEFT, IS NOT REQUIRED IN CARS SO EQUIPPED.

SIDE FILLER ASSEMBLIES

NOTE ●

NAILING OF "FILL PIECES" IS NOT REQUIRED EXCEPT THAT EACH "FILL PIECE" LOCATED NEAREST THE DOOR OPENINGS OF THE CAR WILL BE SECURED AGAINST LONGITUDINAL MOVEMENT W/1-6d NAIL DRIVEN THROUGH THE SIDE FILLER PANEL AND INTO THE "FILL PIECE".

SPECIAL NOTES:

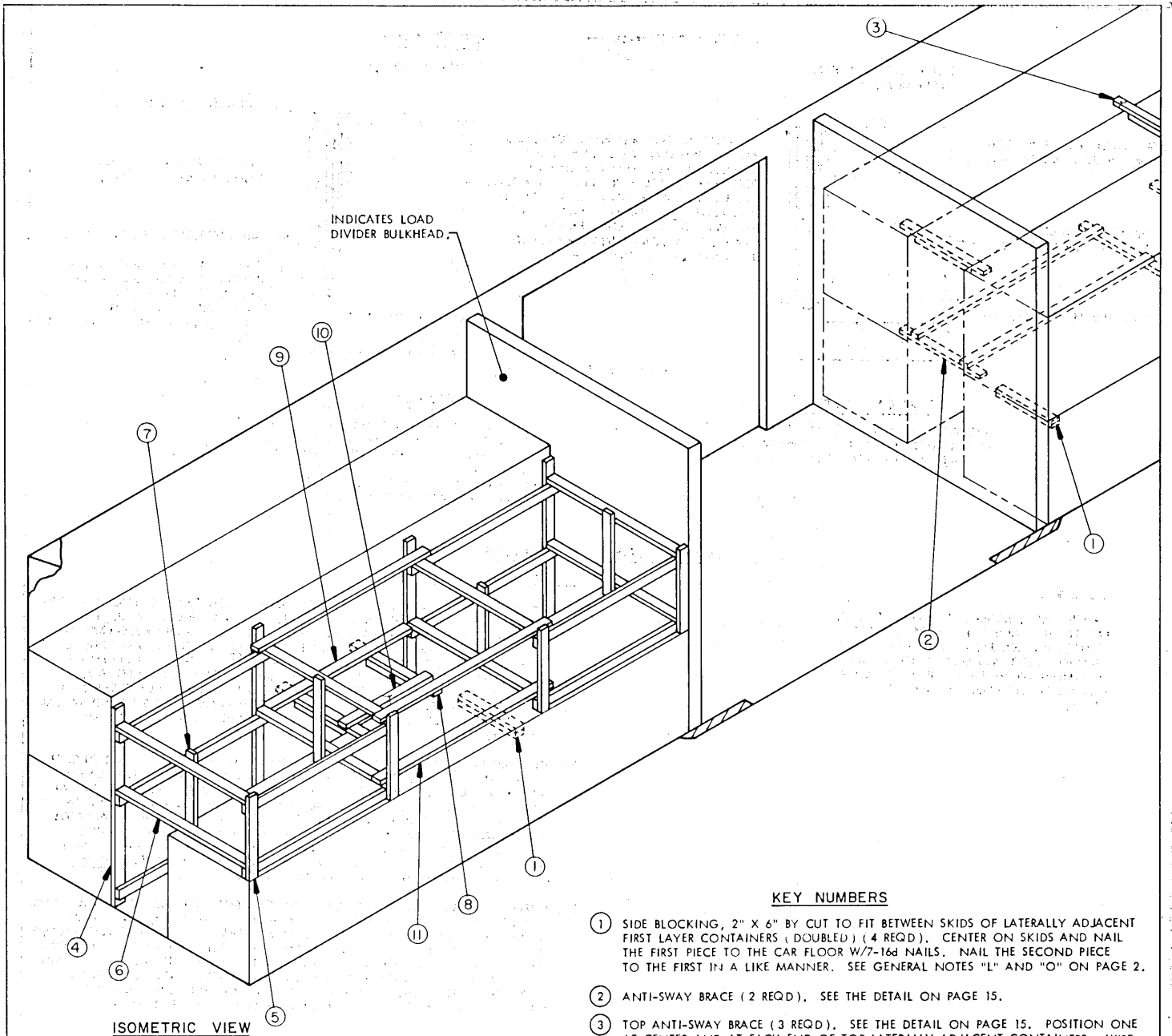
1. THE OUTLOADING PROCEDURES SPECIFIED ON PAGES 20 THRU 25 DEPICT METHODS OF OUTLOADING CONTAINERS OF 1-UNIT, 4-UNIT AND 8-UNIT PACKS IN CUSHIONED BOX CARS WHICH ARE EQUIPPED WITH LOAD DIVIDER BULKHEADS AND WITH OR WITHOUT ADJUSTABLE SIDE FILLERS. CAUTION: ONLY CARS EQUIPPED WITH LOAD DIVIDERS MANUFACTURED BY EVANS, EQUIPCO, OR PRECO MAY BE USED. LOAD DIVIDERS MANUFACTURED BY TRANSCO ARE NOT ACCEPTABLE, WHETHER OF ALUMINUM OR STEEL CONSTRUCTION. ALSO, ONLY CUSHIONED CARS THAT HAVE SLIDING CENTER SILL TYPE CUSHIONING DEVICES OR END-OF-CAR TYPE DEVICES WHICH HAVE AT LEAST FIFTEEN INCHES (15") OF TRAVEL ARE ACCEPTABLE.
2. BOX CARS EQUIPPED WITH ADJUSTABLE SIDE FILLERS THAT HAVE 3/8" OR THICKER PANELS MAY BE USED. HOWEVER, THESE SIDE FILLERS MUST NOT BE USED FOR LATERAL BLOCKING; THEY MUST BE RETRACTED AND LOCKED AGAINST THE CAR SIDEWALL. A "FILL PIECE" MUST BE INSTALLED IN THE VOID BETWEEN THE CAR SIDEWALL AND THE SIDE FILLER PANEL. SEE THE "TYPICAL TYPE A" VIEW ABOVE FOR GUIDANCE. IF THE BACKS OF THE SIDE FILLER PANELS ARE REINFORCED WITH VERTICAL AND HORIZONTAL STEEL MEMBERS AS SHOWN IN THE "TYPICAL TYPE B" VIEW ABOVE, THE "FILL PIECE" MATERIAL IS NOT REQUIRED. NOTE: DUNNAGE MATERIALS MUST NOT BE NAILED TO SIDE FILLERS.
3. AFTER THE LOAD DIVIDER BULKHEADS ARE POSITIONED AGAINST THE LADING, AND THE LOCKING PINS ARE ENGAGED IN THE HOLES OF THE RAILS, THE LOWER LOCKING PINS MUST BE INSPECTED TO ENSURE THAT THE PINS ARE FULLY ENGAGED IN THE LOCKING HOLES. IF THE PINS ARE NOT FULLY SEATED IN THE LOCKING HOLES, THE LINKAGE MECHANISM WILL BE ADJUSTED AS REQUIRED SO THAT THE PINS WILL BE FULLY SEATED INTO THE LOCKING HOLES OF THE LOWER RAILS. IF PRESENT, DEBRIS MUST BE REMOVED FROM BENEATH THE LOCKING HOLES WHICH HAVE BEEN SELECTED FOR SECURING A LOAD DIVIDER BULKHEAD.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	274	183
NAILS	NO. REQD	POUNDS
10d (3")	168	2-3/4
12d (3-1/4")	48	1

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
1-UNIT PACK	39	17,940 LBS
DUNNAGE		462 LBS
TOTAL WEIGHT		18,402 LBS



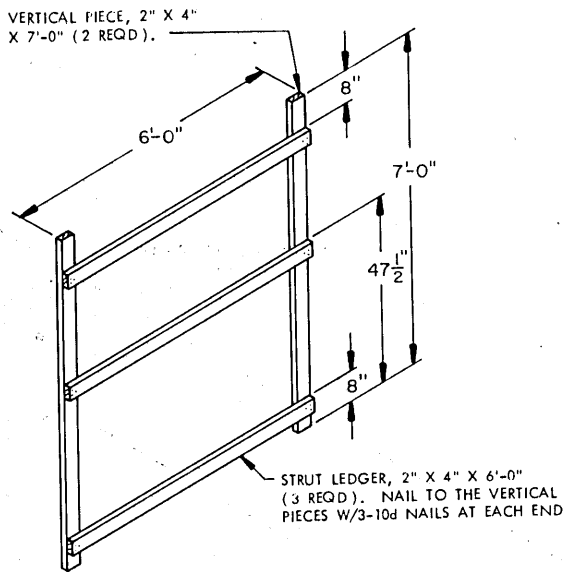
ISOMETRIC VIEW

KEY NUMBERS

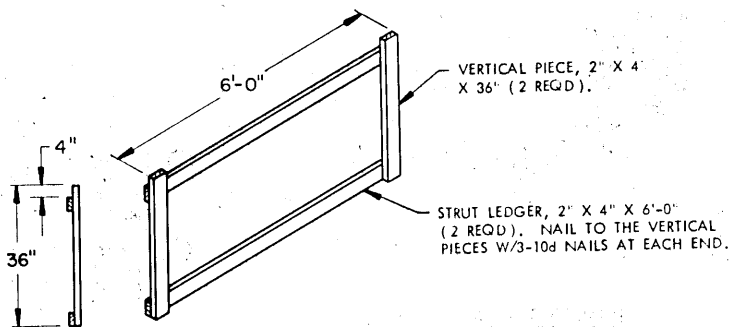
- ① SIDE BLOCKING, 2" X 6" BY CUT TO FIT BETWEEN SKIDS OF LATERALLY ADJACENT FIRST LAYER CONTAINERS (DOUBLED) (4 REQD). CENTER ON SKIDS AND NAIL THE FIRST PIECE TO THE CAR FLOOR W/7-16d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER. SEE GENERAL NOTES "L" AND "O" ON PAGE 2.
- ② ANTI-SWAY BRACE (2 REQD). SEE THE DETAIL ON PAGE 15.
- ③ TOP ANTI-SWAY BRACE (3 REQD). SEE THE DETAIL ON PAGE 15. POSITION ONE AT CENTER AND AT EACH END OF TOP LATERALLY ADJACENT CONTAINERS. WIRE TIE TO CONTAINER STRAPS WITH NO. 8 GAGE BLACK ANNEALED WIRE AND TWIST ENDS TOGETHER.
- ④ SUPPORT GATE (2 REQD). SEE THE "SUPPORT GATE A" DETAIL ON PAGE 23.
- ⑤ SUPPORT GATE (2 REQD). SEE THE "SUPPORT GATE B" DETAIL ON PAGE 23.
- ⑥ LATERAL STRUT, 2" X 4" BY CUT TO FIT (8 REQD). TOENAIL TO VERTICALS OF GATES MARKED ④ AND ⑤ W/2-12d NAILS AT EACH END.
- ⑦ VERTICAL STRUT BRACING, 2" X 4" X 36" (4 REQD). CENTER ON AND NAIL TO THE LATERAL STRUTS MARKED ⑥ W/2-10d NAILS AT EACH JOINT.
- ⑧ ANTI-SWAY BRACE (2 REQD). SEE THE "TOP ANTI-SWAY BRACE" DETAIL ON PAGE 15. POSITION THE SUPPORT PIECE OF THE ASSEMBLY ON TOP OF THE FIRST-LAYER CONTAINERS AND AGAINST THE INNER END OF THE SKID OF THE SECOND-LAYER CONTAINER.
- ⑨ TIE PIECE, 2" X 4" X 70" (1 REQD). POSITION AGAINST THE SECOND-LAYER CONTAINER SKIDS AND NAIL TO THE ANTI-SWAY BRACES MARKED ⑧ W/3-10d NAILS AT EACH JOINT.
- ⑩ TIE PIECE, 2" X 4" X 42" (1 REQD). POSITION ON TOP OF AND APPROXIMATELY 6" FROM ENDS OF ANTI-SWAY BRACES MARKED ⑧ AND NAIL TO THE BRACES W/3-10d NAILS AT EACH END. WIRE TIE TO THE CENTER STRAP OF THE FIRST-LAYER CONTAINER WITH NO. 8 GAGE BLACK ANNEALED WIRE AND TWIST ENDS TOGETHER.
- ⑪ LONGITUDINAL TIE PIECE, 2" X 4" X 7'-0" (3 REQD). POSITION AS SHOWN AND NAIL TO LATERAL STRUTS MARKED ⑥ W/3-10d NAILS AT EACH END.

SPECIAL NOTES:

1. A 7-CONTAINER LOAD OF 4-UNIT PACKS IS SHOWN IN A 50'-6" LONG BY 9'-2" WIDE BOX CAR WITH 10'-6" WIDE THROUGH DOOR OPENINGS AND DEPICTS PROCEDURES FOR AN OMITTED CONTAINER FROM A FULL-LOAD-QUANTITY OF 8 CONTAINERS. WIDER CARS CAN BE USED. SEE GENERAL NOTES "F" AND "J" ON PAGE 2 AND THE SPECIAL NOTES ON PAGE 21. ALSO SEE NOTE 2 BELOW FOR LOADING GUIDANCE.
2. AN 8-CONTAINER LOAD CAN BE SHIPPED BY OMITTING PIECES MARKED ④ THRU ① AND PROVIDING TWO (2) ADDITIONAL ANTI-SWAY BRACES MARKED ② AND THREE (3) ADDITIONAL TOP ANTI-SWAY BRACES MARKED ③ AND APPLYING PROCEDURES SPECIFIED FOR THE 4-CONTAINER LOAD UNIT DEPICTED IN THE ISOMETRIC VIEW. IT SHOULD BE NOTED HOWEVER, THAT FOR CARS EQUIPPED WITH THROUGH DOOR OPENINGS, IT MAY BE NECESSARY THAT THE THIRD STACK OF CONTAINERS LOADED INTO THE CAR BE POSITIONED AGAINST THE CAR SIDE-WALL ON THE LOADING SIDE OF THE CAR TO PROVIDE CLEARANCE FOR LOADING OF THE FOURTH STACK OF CONTAINERS.
3. FOR SHIPMENT OF A 6-CONTAINER LOAD, OMIT PIECES MARKED ④ THRU ① AND PROVIDE THREE (3) ADDITIONAL TOP ANTI-SWAY BRACES MARKED ③ FOR THE 1-LAYER LOAD UNIT.



SUPPORT GATE A
(FOR 4-UNIT PACK)

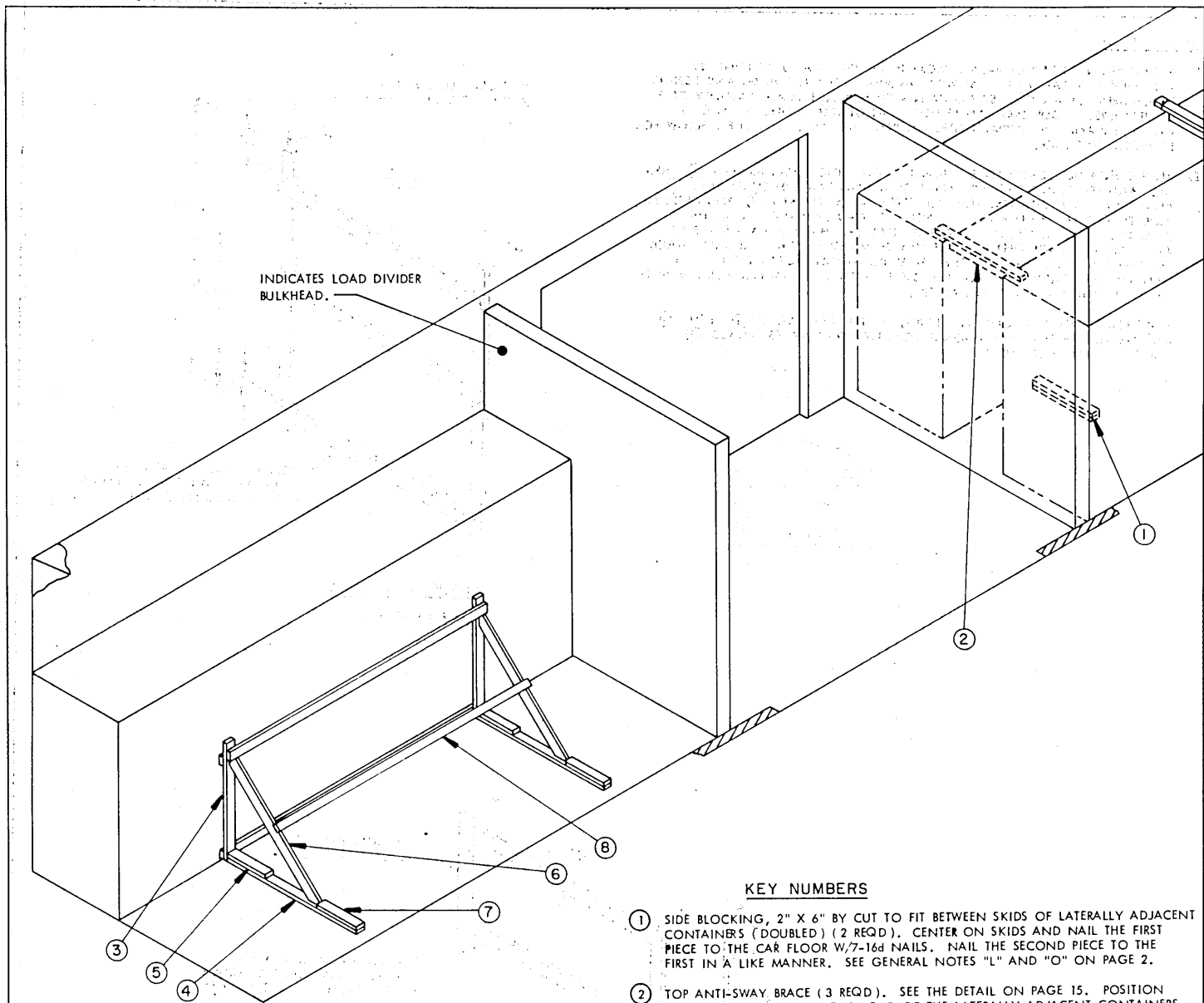


SUPPORT GATE B
(FOR 4-UNIT PACK)

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	259	173
2" X 6"	19	19
NAILS	NO REQD	POUNDS
10d (3")	56	1
12d (3-1/4")	44	3/4
16d (3-1/2")	130	3
WIRE, NO. 8 GAGE ----- AS REQD ----- NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
4-UNIT PACK	7	11,375 LBS
DUNNAGE		485 LBS
TOTAL WEIGHT		11,860 LBS



INDICATES LOAD DIVIDER
BULKHEAD.

ISOMETRIC VIEW

KEY NUMBERS

- ① SIDE BLOCKING, 2" X 6" BY CUT TO FIT BETWEEN SKIDS OF LATERALLY ADJACENT CONTAINERS (DOUBLED) (2 REQD). CENTER ON SKIDS AND NAIL THE FIRST PIECE TO THE CAR FLOOR W/7-16d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER. SEE GENERAL NOTES "L" AND "O" ON PAGE 2.
- ② TOP ANTI-SWAY BRACE (3 REQD). SEE THE DETAIL ON PAGE 15. POSITION ONE AT CENTER AND AT EACH END OF THE LATERALLY ADJACENT CONTAINERS. WIRE TIE TO CONTAINER STRAPS WITH NO. 8 GAGE BLACK ANNEALED WIRE AND TWIST ENDS TOGETHER.
- ③ LCL GATE (1 REQD). SEE THE "LCL SIDE GATE C" DETAIL ON PAGE 19. POSITION TO CENTER LONGITUDINALLY AGAINST SIDE OF CONTAINER.
- ④ FLOOR CLEAT, 2" X 4" X 60" (2 REQD). ALIGN WITH VERTICAL OF SIDE GATE MARKED ③ AND NAIL TO THE CAR FLOOR W/1-16d NAIL EVERY 8".
- ⑤ POCKET CLEAT, 2" X 4" X 18" (2 REQD). NAIL TO THE FLOOR CLEAT MARKED ④ W/3-16d NAILS AND TOENAIL TO THE VERTICAL OF THE SIDE GATE MARKED ③ W/2-12d NAILS.
- ⑥ DIAGONAL BRACE, 2" X 4" X 57-1/4" (2 REQD). SEE THE "DIAGONAL BRACE C" DETAIL ON PAGE 19. TOENAIL TO THE VERTICAL OF SIDE GATE MARKED ③ AND TO FLOOR CLEAT MARKED ④ W/2-12d NAILS AT EACH END.
- ⑦ BRACE CLEAT, 2" X 4" X 18" (2 REQD). POSITION AGAINST DIAGONAL BRACE MARKED ⑥ AND NAIL TO FLOOR CLEAT MARKED ④ W/4-16d NAILS.
- ⑧ TIE PIECE, 2" X 4" X 10'-0" (1 REQD). NAIL TO DIAGONAL BRACES MARKED ⑥ W/2-10d NAILS AT EACH END.

SPECIAL NOTES:

1. A 3-CONTAINER LOAD OF 8-UNIT PACKS IS SHOWN IN A 50'-6" LONG BY 9'-2" WIDE BOX CAR WITH 10'-6" WIDE THROUGH DOOR OPENINGS AND DEPICTS PROCEDURES FOR AN OMITTED CONTAINER FROM A FULL-LOAD-QUANTITY OF 4 CONTAINERS. WIDER CARS CAN BE USED. SEE GENERAL NOTES "F" AND "J" ON PAGE 2 AND THE SPECIAL NOTES ON PAGE 21.
2. A 4-CONTAINER LOAD CAN BE SHIPPED BY OMITTING PIECES MARKED ③ THRU ⑧ AND PROVIDING TWO (2) ADDITIONAL SIDE BLOCKING PIECES MARKED ① AND THREE (3) ADDITIONAL TOP ANTI-SWAY BRACES MARKED ② AND APPLYING PROCEDURES SPECIFIED FOR THE 2-CONTAINER LOAD UNIT DEPICTED IN THE ISOMETRIC VIEW. IT SHOULD BE NOTED HOWEVER, THAT FOR CARS EQUIPPED WITH THROUGH DOOR OPENINGS, IT MAY BE NECESSARY THAT THE THIRD CONTAINER LOADED INTO THE CAR BE POSITIONED AGAINST THE CAR SIDEWALL ON THE LOADING SIDE OF THE CAR TO PROVIDE CLEARANCE FOR LOADING OF THE FOURTH CONTAINER.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	81	54
2" X 6"	20	20
NAILS	NO. REQD	POUNDS
10d (3")	22	1/2
12d (3-1/4")	24	1/2
16d (3-1/2")	58	1-1/4
WIRE, NO. 8 GAGE ----- AS REQD ----- NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
8-UNIT PACK -----	3 -----	8,520 LBS
DUNNAGE -----		187 LBS
TOTAL WEIGHT -----		8,707 LBS

